

THE MEDICAL AND SURGICAL REPORTER

No. 1622.

PHILADELPHIA, MARCH 31, 1888. VOL. LVIII.—No. 13.

COMMUNICATIONS.

THE DISEASES OF THE STOMACH, AS JUDGED BY A NEW CHEMI- CAL REAGENT.¹

BY PROFESSOR GERMAIN SÉE,

MEMBER OF THE FACULTY OF MEDICINE, PHYSICIAN TO THE
HOTEL DIEU, PARIS, FRANCE.

[Professor Sée, having alluded to the difficulty of diagnosis of chronic affections of the stomach by the ordinary methods, and the unsatisfactory nature of some of the tests of the acidity of gastric juice employed, remarked that he had found Gunzburg's new reagent, the *phloroglucine vanillin test*, to perfectly meet the want of a delicate and sure test of the presence of hydrochloric acid in the gastric juice. He then spoke as follows.]

An important group of gastric diseases comprehends the cancers, the ulcers, the amyloid degenerations (which are rare), the scleroses or indurations of the sub-mucous tissue, the atrophies of the walls, and lastly, the lesions of toxic, and especially alcoholic origin. All that does not enter into this grave category has been classed under the name of dyspepsia. Formerly this term was applied to almost any gastric disorder—to gastralgia, to flatulence and even to vomiting, although the latter does not always imply a disturbance of the digestion. Dyspepsia was then merely a symptom-entity. Afterwards came Broussais with his famous doctrine of gastritis, which included a multitude of morbid conditions. This view, making dyspepsia an inflammatory trouble, was soon abandoned by reason of its absurd complications, and gave place to the *prim-*

ordial dyspepsia of Beau, a stupendous pathological bugbear, supposed to give rise to a variety of complaints—to chlorosis as well as anæmia, to tuberculosis and to cancer. This new notion soon came into discredit, and the German pathologists substituted for it that of mucous catarrh of the stomach—the word dyspepsia was erased from nosology. But the last word was not yet said. During the last eight years a vast amount of scientific investigation has been going on, which has put to the test accepted theories, and pretty effectually cleared up the mysteries connected with this subject. In my treatise on “Gastro-Intestinal Dyspepsias,” (second edition, 1883), I have endeavored to demonstrate two facts:

1. That dyspepsia is always and necessarily a defective chemical process, due to some alteration of the elements of the gastric juice, and especially of the hydrochloric acid; the gastric juice may, moreover, be imperfect by reason of inertness of pepsin, or by reason of excess of peptones formed, or of mucus preformed, all of which retard the digestion. This constitutes dyspepsia proper. At the last three Congresses of German physicians, Van-der-Velden, Leube, Riegel, Ewald and Boas, Edinger and Jaworski, have endorsed, without giving me credit for my own researches and conclusions, this chemical view of dyspepsia, adopting principles of pathogenesis and a classification which I have long taught.

2. The second fact which I endeavored to bring prominently to light at the epoch when I published my book, was this: All the properties of the stomach which do not belong to the domain of chemistry, such as the sensory and motor innervation, are simply auxiliaries to true digestion; they may, in fact, undergo grave modifications without any real digestive trouble resulting.

¹A paper read before the Academy of Medicine of Paris, January 17, 1888.

When the gastric innervation is impaired, there ensues a series of perturbations which often simulate the phenomena of dyspepsia, and to such an extent as to render the distinction very difficult; we have, however, to do in these cases only with nervo-motor states, with atony or spasm of the stomach.

Diagnosis of Chemical Dyspepsia.

Let us now inquire what are the chemical alterations which constitute true dyspepsia. First and foremost, we need to ascertain if the acids of the stomach, and especially hydrochloric, are deficient or lacking. To attain this end, and in order to obtain gastric juice, physiologists no longer rely on gastric fistulæ practiced on animals, or on accidental fistulæ, the results of wounds in man, for the subjects of these lesions always have the stomach exposed by an external opening, so that its condition has become in some sense pathological. Nothing can be considered as exact so long as the analyses do not pertain to the gastric secretion of a healthy man, or one with the stomach intact. Twenty years ago we used to employ Kussmaul's stomach-pump to obtain gastric juice; we now use a soft rubber tube, not much larger than a catheter, which is connected with an aspirator, and by this the juice is collected before and during digestion. Leube injects ice water before a meal, in order to provoke the gastric secretion, then extracts the gastric juice by means of the soft tube and aspirator. Jaworski and Gluzinski obtain the juice by a similar procedure, injecting water at 64.4° F., and aspirating the contents of the stomach after fifteen minutes. Ewald and Boas do not dilute the gastric liquid; they facilitate its extraction by means of pressures made over the abdominal and epigastric regions. I employ a similar method, as we really need but a few drachms of the gastric juice for purposes of testing. I make use of Potain's apparatus with pressure over the stomach; after a few short aspirations the liquid rises from the stomach into the receiving bottle, and is pure from any admixture with water. Durand-Fardel, my clinical chief, operates in a similar manner, obtaining by means of an incomplete vacuum the small quantity of pure gastric juice required, and without in any way injuring the stomach.

Reagents.

The reagents employed for investigation of the acids of the stomach are tropéoline, methyl violet, ferro-sulpho-cyanide of potassium, the phenic perchloride of iron, and the

phloroglucine-vanillin test of Gunzburg; the Congo-red should also be mentioned.

1. Tropéoline, or Orange No. 4, first proposed by Van-der-Velden, is a concentrated aqueous yellowish solution, which becomes bright red under the influence of the least trace of acids. 2. Methyl violet was introduced by Laborde as a good test for lactic acid, which he considers the predominant acid in the stomach, being formed there, as well as hydrochloric acid. A few drops of this reagent, according to Laborde, gives with the contents of the stomach, if lactic acid be there, a pale blue, becoming deep blue. 3. If the acidity of the stomach be from the acids of fermentation (such as sarcolactic acid), it is best recognized by ferro-sulpho-cyanide of potassium, which decolorizes the matters from the stomach. In a liquid form the stomach containing only two to four tenths per cent. of acids, especially of HCl, the above reagents reveal the presence of the latter, while lactic acid only gives the coloration if in considerable quantity. In the latter case, as well as when the acidity is due to fatty acids (butyric acid, etc.), the best test is the phenic perchloride of iron, which gives an ash-gray color.

Now we know, according to the researches of Ewald and Boas, that during the first thirty minutes of digestion, lactic acid predominates, being formed prior to hydrochloric; then the two acids exist together (experiments of Berthelot and Richet); then there is a phase exclusively hydrochloric, which begins sometimes after half an hour, sometimes after an hour. This applies only to healthy states; in certain morbid states the digestive periods, and especially the lactic phase, are greatly prolonged. The existence of these phases, which I have called the *amylolytic period* and the *hydrochloric period*, brings confusion into our researches, for our reagents cannot enlighten us as to the relative proportion of mineral acids and organic acids. Here the recent discovery of Gunzburg comes to our help, his phloroglucine-vanillin test constituting the surest and most expeditious reagent. Gunzburg got the hint from Wiesner, who had observed that pine wood soaked in a solution of phloroglucine and moistened in strong hydrochloric acid, takes on a deep red color. Now the substance which with phloroglucine and HCl gives the red stain, is vanillin. Two grammes (thirty grains) of phloroglucine, and one gramme (fifteen grains) of vanilline, with thirty grammes (nearly one oz.) of absolute alcohol, give a reddish yellow solution. One drop of this solution in presence of even a trace of a con-

centrated mineral acid, takes on immediately a bright red hue, while at the same time beautiful red crystals are deposited. The organic acids, as lactic and acetic, give only negative results in presence of this reagent. If the proportion of the mineral acid present is very minute, it will be necessary to slowly evaporate the liquid in a porcelain crucible; you will then get a deposit around the edges of fine red crystals. For this purpose you should use a spirit lamp, and take care that the liquid which you are testing does not boil. In testing gastric juice, you take a few drops of the fresh liquid from the stomach, filter, and add as much of the phloroglucine vanillin solution; evaporate with the precautions mentioned, and you will obtain the color reactions above described. When the gastric liquid contains considerable quantities of albuminates or peptones, the isolated crystals are not observed, but the bright coloring persists, and the crucible is covered with a mixture composed of albuminates and fragments of crystals.

[Prof. Sée further stated that this test is only of value as giving a proximate rather than an exact estimate of the proportion of hydrochloric acid in a given quantity of gastric juice. There are all shades of color, from faint to deep red, corresponding to a minus or plus quantity of HCl in the gastric juice under examination. Moreover, the test is especially valuable in revealing the presence of mineral in contradistinction to organic acids. The professor then took up the subject of the time most appropriate for obtaining gastric juice. Leube extracts gastric juice seven hours after a hearty meal of soup, beef steak and bread; Riegel aspirates the gastric fluid five hours after a meal when the stomach is full. Professor Sée's method is as follows:]

"Instead of commencing the test at the end of fifteen minutes, and repeating it every quarter of an hour till four or five trials have been made (method of Jaworski and Gluzinski), a procedure which is very trying to the person under examination, I practice the extraction of the juice at the end of forty-five or sixty minutes after a meal; then, instead of administering ten ounces of liquid, I permit the ingestion of only a very small quantity of water, and in this way I am sure to obtain several drachms of gastric juice, which is quite sufficient for purposes of testing. I use now no other tests, repeating the examination the next day with Gunzburg's reagent, and perhaps the following day, till satisfied as to the acid quality of the gastric juice."

APPLICATION OF THE CHEMICAL DATA. DIGESTIVE TROUBLES WITHOUT CHEMICAL FAULT. —If now we apply these data to the divers diseases of the stomach, we shall see the pseudodyspepsias or nervous dyspepsias form a class apart from the chemical dyspepsias, properly so called. There are individuals who, with a normal proportion of HCl in their gastric juice (0.15 to 0.2 per cent.), experience manifest digestive disorders—a sensation of pressure or of pain at the epigastrium, fullness after eating, gaseous eructations, capricious appetite, with absence of vomiting, regurgitations and emaciation. Chemical examination of the gastric juice shows, besides hydrochloric acid, lactic acid, sometimes in normal, sometimes in abnormal quantity. Digestion is especially painful after the ingestion of food of a heavy, "hearty" character; while light food, and especially amylaceous food, gives little trouble. These are "nervous dyspepsias," cases of atony of the stomach, or simply gastro-intestinal neuroses. Now for the positive data:

FIRST GROUP. *Anachlorhydric secretions.*

—A first group comprehends the anachlorhydric secretions; a second group, hydrochloric excess; a third group, the variations. From recent researches the fact is brought to light that the diminution or absence of the gastric secretion is not as frequent as was formerly taught. Thus, even in fever, true acid gastric juice is not completely wanting. In reality, we may reduce to two the morbid affections which are attended with a minimum of hydrochloric acid in the gastric juice: 1, carcinoma of the stomach, with or without dilatation, and perhaps atrophy or amyloid degeneration of the organ: 2, certain dyspepsias called mucous dyspepsias, and especially those which result from inanition, from marasmus, which constitute the most common kinds of dyspepsia.

Cancers.—[Prof. Sée remarked that all authorities of late years—Riegel, Van-dervelden, Ewald, etc., have testified to the absence of HCl in cancer of the stomach. Riegel attributes this to a specific and destructive action of the cancer juice, and to concomitant mucous catarrh. The same absence (which is not, however, absolute) has been noticed in amyloid degenerations and atrophies of the stomach, and in sclerosis.]

Mucous dyspepsias.—After carcinoma the morbid condition, which seems most to arrest the production of hydrochloric acid secretion, is mucous catarrh. It is certain that at the onset of the disease, hydrochloric acid is present; when later there are lesions of texture, as well as atrophy of the glands,

and interstitial deposits, the acid secretion is no longer capable of demonstration.

Dyspepsias from inanition and marasmus.—It is certain also that the production of Hcl may be wanting in all cases of marasmus, as well as after grave hemorrhages, etc. This absence has been repeatedly noticed in tuberculous, uræmic, and diabetic dyspepsias.

SECOND GROUP. *Digestive troubles with hyper-secretion of gastric juice, or hyper-acidity.*—While gastric disorders with diminished or suppressed secretion are rarer than was once supposed, it has recently been shown by painstaking chemical researches that excess of hydrochloric acid secretion is one of the most common occurrences. In 200 cases of dyspepsia, Boas noted this hyper-secretion in 60. The dyspepsia from excess of acid is quite different from that in which acid is deficient. The distress is intimately connected with the act of digestion, and does not begin immediately after the introduction of food, but after the end of half an hour, an hour, or even later. What these patients principally complain of is the highly acid regurgitations of food, belchings of sour gas which comes up into the throat and mouth; there are, withal, burning sensations along the œsophagus, and severe pains, often of a piercing character, sometimes referred to the pit of the stomach. The appetite is feeble or *nil*, the tongue heavily coated, the bowels constipated, and in an advanced state of the disease, the patient is much emaciated. The analysis of the gastric secretions after a test meal, shows that this train of symptoms depends on excess of hydrochloric acid production; it is not even rare to note 0.4 to 0.5 per cent. of Hcl present. The organic and volatile acids are more or less completely wanting. In this kind of dyspepsia the digestion of proteinaceous matters is well accomplished; it is even probable, considering the rapidity of peptonization, that the presence of peptones in excess hinders the rest of the digestion. The digestion of starchy food is, however, impeded; for with more than one-tenth of one per cent. (0.1) of Hcl in the gastric juice, maltose ceases to be formed. If, in fact, we give to these patients an amylaceous mixture, and examine after an hour the filtered liquid from the stomach, we find plain evidence of *incomplete saccharification*: a solution of iodide reveals the presence of *erythro-dextrine*, while in the normal state we ought to find *achro-dextrine*, or even maltose.

Chlorhydric dyspepsia.—It is rare that the digestive disorders are any worse than those above described; but with excess of secretion

the dyspepsia becomes *chlorhydric*; there is even sometimes a permanent hydrochloric-hypersecretion, so that in the morning when the stomach is empty, you will obtain by aspiration several drachms of liquid containing Hcl in abundance, and capable of digesting albumen. This form has been described by Reichman, Jaworski and Riegel, who found in four cases of this kind, a marked dilatation of the stomach, resulting, doubtless, from prolongation of the digestive process.

Résumé.—Without speaking of nervous dyspepsia, in which the gastric juice is normal, there exists a dyspepsia with deficiency of hydrochloric acid, and a dyspepsia with excess of hydrochloric acid; the latter may go on to constitute a *permanent hyper-acid dyspepsia*. But the etiological conditions of these acid dyspepsias are unknown; we know only that the dyspepsias characterized by excess of acidity are often associated with hæmatemesis, and consequently, with ulcer of the stomach. We know, moreover, that these dyspepsias oftentimes rest on a chlorotic basis; chlorotic patients are quite subject to attacks of cardialgia, which marvelously get well under alkalies given in enormous doses. A patient of this kind is now under treatment in Ward St. Jeanne, Hôtel Dieu.

THIRD GROUP. *Gastric juice secretions variable as to hydrochloric acid.*—This group includes dilatation of the stomach, of which so much has been said of late years. I am of opinion that this dilatation is not a primordial disease of the stomach, but only a symptom more or less pronounced of divers affections of the stomach, or, what is more frequently the case, of divers morbid states of the intestine. Moreover, the signs of gastro-ec-tasis are very uncertain, and in my experience are often referable to dilatation of the transverse colon. In doubtful cases, Ehrlich advises, in order to assure one's self that dilatation of the stomach exists, to give the patient salol in doses of fifteen or thirty grains. In the normal state this medicine passes intact from the stomach to the intestine, where it is mostly broken up by the pancreatic juice, then absorbed and eliminated at the end of an hour by the urine; if the salol does not appear till much later in the urine, it is because the stomach is dilated and retains the medicament. I have found four kinds of causes: 1. Fibrous or cancerous stenosis of the pylorus. 2. Atony of the gastric walls (through muscular enfeeblement). 3. Atony of the intestines, affecting the pylorus, and allowing gases to pass into and distend the stomach. 4. Intestinal

dyspepsia—simple chronic (mucous or membranous) enterocolitis, from which result gases by decomposition of the contents of the intestine, then pyloric insufficiency, and distention and dilatation of the stomach.

In five cases the gastric juice presented marked variations; in pyloric stenosis, there was no hydrochloric acid; in simple atony direct or consecutive, the acid was not lacking; less is known concerning the results of intestinal dyspepsia on the gastric juice. Out of thirty-three cases of dilatation studied by Riegel, twenty-one were simple; in none of these cases was the acid wanting, and in all the peptic force of the gastric juice was intact. Riegel has not made sufficient account of the influence of the intestine in producing dilatation. At any rate we may affirm that dilatation of the stomach is not destined to embrace or take the place of that dyspepsia which Beau considered the source of all evils; dyspepsia and dilatation are quite distinct, and dilatation may exist a long time without producing dyspeptic troubles. Nevertheless, in old dilatations, the gastric contents may undergo putrid changes, and thus a kind of "putrid dyspepsia" result.

OBSERVATIONS.—[Prof. Sée gives reports of sixteen cases in which examinations of the gastric juice were made. The first group comprehended cases in which Hcl was absent: i.e., two of cancer of the stomach, two of tuberculosis (pulmonary phthisis), one of heart disease, one of diabetes, one of dyspepsia in an old paralytic patient, one of dilatation of the stomach of long standing, and one of gonorrhoeal rheumatism. This group he calls the *anachlorhydric group*. The second group, which he calls the *hyperacid group*, comprehended one case of muco-albuminous enteritis of long standing, and another of dyspepsia from anæmia. The "normal group" contains two cases of simple dilatation with enteritis, one case of chronic gastro-ectasia without emaciation, and one of intestinal dyspepsia.]

Interpretation of the Anachlorhydric or Negative Digestions.

The fact that hydrochloric acid is wanting in the gastric secretion is no reason for the conclusion that the digestive process is a total failure. The stomach may lack the ability to do its work, and yet the intestinal digestion may be well performed, and the general nutritive functions may be still kept at the normal level. In cases of this kind, the stomach is only a place of transit for the food, and has no function but one of a motor kind,— "churning" and expelling the aliments;

almost the entire amount of albuminates ingested escapes from the stomach before being peptonized, for the reason that no hydrochloric acid is secreted, and such gastric juice as the stomach produces acts only by virtue of the organic acids which it contains, and does not accomplish the peptonization of foods; the real labor of digestion devolves on the intestine.

A second cause favors the deterioration of the gastric juice, and the lessening or suspension of hydrochloric acid formation, namely, a vitiated state of the blood: the diabetic, the nephritic, the cardiac, the tuberculous dyspepsias are cases in point. Why these conditions interfere with the production of normal gastric juice is not well understood. At the same time, patients afflicted with these diatheses do not always suffer from indigestion; the intestinal digestion may be normal, and make up for the deficiency on the part of the stomach, and the general nutrition may be kept good. As soon, however, as uræmia or glycæmia, or venon stasis from cardiac failure or tuberculosis affects the intestine, diarrhoea, dependent on some one of those conditions, sets in, and sweeps off the products of digestion before their absorption; then the supplementary digestion having failed, malnutrition and emaciation rapidly follow.

There is a third class of cases, common enough in connection with anachlorhydric digestion. There are real gastric troubles—flatulence, slowness of digestion, pyrosis, pain and discomfort in the stomach, and nervous symptoms of a depressive kind. Hydrochloric acid is wanting, but the motor functions of the stomach are also at fault. The pancreatic and intestinal juices may even here compensate what is lacking on the part of the stomach, the liver may do its work well, and the patient may not seriously suffer from denutrition. In cancer of the stomach, all the functions of the stomach, chemical as well as nervo-motor, are compromised, while the production of the intestinal juices is suspended by the starving of the glands; the function of absorption by the lymphatics in both stomach and intestines is in abeyance, so that foods are neither transformed nor assimilated. On the other hand, in simple chlorhydric dyspepsia, the resources of the intestine suffice for the entire performance of digestion.

[Prof. Sée spoke of certain dyspepsias which are often misunderstood, and which are properly intestinal. The chemical functions of the small intestine may be disordered, or the large intestine may be in a

state of atony. There is pain at the pit of the stomach, and distention of the abdomen with gas, which sometimes forces the pylorus; the patient suffers from constipation, alternating with diarrhoea, cerebral and nervous troubles, severe dyspeptic discomfort three or four hours after a meal. The atony of the colon may result from simple "muscular debility," or a mechanical obstacle to the expulsion of the contents of the bowel, *e. g.*, tumors of the womb, or retroversion, hemorrhoids, hernia, etc.]

Bradypepsia.—There are cases which neither come under the category of chemical dyspepsia of the stomach, nor atony of the intestine, and which are characterized by simple retardation in the stomachal digestion; these are included under the head *bradypepsia*. We know, in fact, that the fragments of albumen in normal digestion appear, at the end of from thirty to sixty minutes, as if gnawed at their borders; we know that if the gastric juice is feebly acid, or neutral, or even alkaline (as is the case with the crustaceæ), the blocks of albumen remain unaltered till the moment when they pass the pylorus. This passage ordinarily takes place when the reaction of the gastric juice is at its maximum—then the larger part of the albuminous substances quit the stomach, and liquid extracted from the stomach at this time contains neither peptones nor acids.

But in the pathological stomach the time of expulsion of the morsels of albumen may vary from fractions of an hour to an entire night. In mucous dyspepsias, in dilatations of the stomach, there is a marked retardation. This slowness of the digestive act is not an indigestion, for the final result is good, and the food ends in being digested, peptonized and absorbed.

TREATMENT.—The common treatment of these gastric affections may be comprised under the three following heads: *Chlorhydrotherapy*, *Alkalinothrapy*, *Evacuants*. With regard to the administration of hydrochloric acid, I have always had grave doubts as to the utility of this medicament, despite the authority of Trousseau; certainly hydrochloric acid pure or associated with pepsin, cannot be regarded as indicated in the dyspepsias attended with hypersecretion of this acid, and these cases are very common. But it is necessary for one to be on his guard against mistaking for signs of acid dyspepsia, the patient's sensation of pyrosis, or of "burning gases," for in these cases the gastric juice may be neutral, or feebly acid. The only way to solve the question is by the

stomach syphon; if hydrochloric acid is in abundance, the free administration of this acid can have only injurious results. We may go even further and say that when hydrochloric acid is wanting, or is present in very small proportion, as in cancer of the stomach, even here the administration of this acid medicinally does no good, for there is no formation of gastric juice, even in presence of the hydrochloric acid. Experience, moreover, proves its uselessness and, I may add, its danger.

The true province of chlorhydrotherapy is dyspepsia with deficiency of acid, or with predominance of the organic or volatile acids, and even in dilatation of the stomach with excess of organic acids. The dose in these cases would be twenty drops of the dilute acid in a little water, to be taken twice or three times a day during the course of the digestion, or after meals.

Alkalinothrapy.—This mode of treatment is still under discussion, at least, as far as the dosage is concerned. Generally, too small doses are given; what we want to do is to neutralize the excess of acid. To determine this excess of acid in a given case, you must aspirate a certain quantity of gastric juice after a test meal, and ascertain the quantity of Congo red necessary to neutralize the filtered gastric fluid. You add bicarbonate of soda till the Congo red turns feebly blue. A quantity in excess of the amount calculated should be used, as carbonate of sodium solutions are rapidly absorbed from the stomach. A proper prescription would be from one drachm to a drachm and a half of sodium bicarbonate dissolved in water, to be taken between meals, and continued for several days.

Evacuants.—These medicines are applicable to all cases of atonic affections of the stomach and intestine. If dilatation of the colon be the cause of the gastro-ectasis, *lavage* of the stomach is indicated as a therapeutic measure. If the intestine provokes pseudo-dyspeptic stomach symptoms, purgatives and laxatives are indicated. Purgatives have long had a reputation for being beneficial in gastric complaints. Why this is I know not, unless the dyspepsias under treatment were pseudo-dyspepsias, having their seat in the intestine.

Regimen.—Milk is prescribed at the present day everywhere (*urbi et orbe*), whether the practitioner have to do with an organic disease of the stomach, or a true gastric dyspepsia, a dilatation of the stomach, an atony of the intestine, or a muco-albuminous enteritis. In any and every one of these cases

you are almost sure to see the milk diet ordered, and often to the exclusion of all other treatment. [Professor Sée condemned this treatment as not giving the best results, and as being often irrational; the milk diet is good in diarrhœic complaints, and is the proper treatment—in fact a *sine qua non*—in ulcer of the stomach.

Another regimen commonly prescribed in dyspepsias, consists of light, tender, juicy meats, with little or no vegetables—starches and fats being forbidden. This regimen may lead to inanition, elements needed for nutrition being withheld. Such a diet has a temporary utility in patients whose gastric juice is poor in Hcl, e.g., mucous dyspepsia, gastro-ectasis complicated with mucous dyspepsia.]

Amylaceous regimen.—In mucous dyspepsias and even in cancer where hydrochloric acid is totally lacking, it is useless and often dangerous to deprive the patient of food principles contained in the starches, and especially of such dietetic substances as are both amylaceous and nitrogenized. In conditions in which hydrochloric acid is in minimum proportion, the amylolitic period of digestion is predominant and rapid, and considerable absorbable maltose is formed with facility. In such cases soups with rice, etc., may be permitted, and also bread and biscuit; fat should be in sparing quantity, or withheld altogether; sometimes potatoes roasted in the ashes may be given, and pea soup or bean porridge.

Meat regimen.—A diet of starchy food ought to be rigorously interdicted in dyspepsias with hypersecretion of hydrochloric acid. Such articles of food are not transformed by the gastric juice; the excess of acid may determine spasm of the pylorus and retention of the amylaceous substances in the stomach, or exaggerated contractions of the muscles of the stomach, causing expulsion before the time, of the incompletely transformed or fermenting aliments. Fresh meat and fish are indicated in these cases, and the patient should virtually live on this diet—beef, mutton, fish, lean ham, in preference to fowl, game or veal. As for *beverages* in dyspepsias, those with hyperacidity are the worse for wine, and tea should be used instead. While fermented liquors are to be avoided, whiskey and brandy in moderation seem to do no harm, except to occasion a slight retardation of the digestion. [In dyspepsias with deficiency of gastric juice, on the other hand, wine is often an advantage by promoting an acid secretion.]

ON EXERCISE FOR THE PREVENTION AND CURE OF DEFORMITIES.

BY A. H. P. LEUF, M. D.,
OF THE UNIVERSITY OF PENNSYLVANIA,
PHILADELPHIA.

Its my object in this note to briefly call attention to what may be done by means of exercise for the prevention and cure of bodily deformities. Let me first say, however, that there is a difference between exercise and "athletics." The latter is a variety of the former. The one is usually either a sport or a business, and only sometimes an "exercise," while the other, if judicious, may be considered a therapeutic and prophylactic remedy of incalculable value. A wrong conclusion must be drawn if, in passing judgment upon the therapeutic value of exercise, our knowledge of its good effects is based only upon what little has been written on the subject. Too few of those qualified for the work have ever made it the object of their main efforts.

It is common enough to hear of the bad effects of over-exercise. Now is this not suggestive? Is not a remedy that is productive of evil also potent for good? If exercise, for instance, will cause an abnormal enlargement of the heart in health, is it not rational to assume that it will strengthen a heart that is abnormally weak? The heart is but a muscle, and what is true of other muscles in this regard is also true of it.

On *a priori* grounds, therefore, it would seem that exercise may be productive of good, especially when there is defective strength and muscle development. When we recollect that muscles never contract without acting upon other parts, we are compelled to admit that those other parts may also be influenced by exercise. For instance, increased muscular action causes increased heat production. It causes tension of the periosteum and bone to which the motive muscles are attached. Thus hyperæmia results, and bone growth is encouraged. Again it affects other structures, as for instance, the heart and lungs (circulation and respiration), by chest expansion, due to raising of the ribs when the proper muscles are contracted.

Deformities are treated by means of braces, supports and elastic bands—*artificial muscles*. These all weaken still more an already feeble muscle. How much better it would be to develop the weaker parts and so relieve the patient in a manner that is at once inexpensive, not unpleasant or ungainly, and that will insure a permanent cure.

But what has been done, and what can be done? is the important query. My experience with properly selected cases has been almost uniformly successful. Among them may be mentioned cases of spinal curvature, club-foot, malposition of parts (as for instance inversion of the toes), pigeon breast, flat chest, and others.

My opportunity for observation at the University of Pennsylvania is a great one, and it has been my good fortune to see young men and boys much benefitted by judicious exercise. Two cases of pigeon breast in boys under my care were much modified in less than three months by a judicious course of gymnastics. Mr. W. B. Page, at present a post-graduate student at the University of Pennsylvania, became the greatest high jumper the world has ever known, because he had *weak legs* in infancy and undertook to strengthen them by *exercise*.

In the summer of 1885, I had under treatment a young professional man much given to hard intellectual work, of sedentary habits, extreme disinclination for physical exercise, possessed of an ever-present feverish restlessness, and who was for years a sufferer from insomnia. His appetite, though for years voracious, gradually failed and left him a dyspeptic. He was tall, thin and flabby, had a weak heart and quick feeble pulse, often dicrotic in character. He was strongly urged to exercise in the open air. He impatiently gave it an unfair trial, consisting of over-exertions at irregular intervals. In the fall he developed a bronchitis that persisted despite the best treatment and a rest out of town and away from all care. In the latter part of February, 1886, he again took up his out-door exercise, and kept it up steadily with the result of getting into fine physical form at the end of the season, when he was wiry and minus fat, and when stripped reminded one of a race-horse. All his muscles were hard, his girths and weight had increased slightly; his mental and physical vigor had undergone a revolution; his appetite was very good and his insomnia gone. This is but one instance of a general restoration by suitable exercise of a worn-out body and mind.

A boy, 11 years of age, was brought to me in the summer of 1881, with posterior and left-lateral spinal curvature. He had had no appetite for about six weeks. He was pale and emaciated, having, according to my knowledge, greatly fallen off in those few weeks. His forward stoop and inclination to the right had been noticed for some time, but its onset had been so insidious

that neither patient nor parents could fix a time for its beginning. He looked cachectic and had a family history of tuberculosis on both sides. He had been to school since six years of age, and was remarkably bright, advancing rapidly in all his studies, and was the pride of all his teachers. The treatment of this boy consisted in the internal administration of the syrup of the iodide of iron in half drachm doses t. i. d., and suitable exercises. A plaster jacket was not applied because of the fear that it might prove so oppressive in the hot weather as to debilitate him still more. The exercises consisted in hanging from a horizontal bar by both hands many times a day, at first for about a few seconds, the time being lengthened as the strength increased. During the intervals he spent most of the time at full length and on the flat of his back on a hard lounge with his hands and arms extended over his head. He was dieted so as to conserve as far as possible his nervous and digestive energies. In less than two months he was practically well, had a good appetite, ruddy cheeks, bright eyes, a somewhat rounded outline, and a *straight* column. The exercise was continued, however, for months afterward.

In the middle of October, 1887, I was consulted about a bright and healthy boy a little over two years old. He turned both toes in while walking or standing. Two or three physicians had been consulted, and one orthopædic surgeon, with the same result, which consisted in the advice to have braces applied to force the feet into proper position. This the parents were loth to do and asked me to suggest some other means worthy of trial. The boy required absolutely no general treatment whatever, for his health was perfect. I advised three exercises. One was to stand upright with the inner side of the shoes touching from heel to toe; then, while the heels remained in contact, the toes were to be turned out as far as possible, held there for a moment, and then returned. This was to be repeated *ad libitum* as an *amusement*. The second consisted in standing with the outer side of one foot against the wall and pressing the side and end of the foot forcibly against the wall. The third consisted in lying upon the floor at full length, back down, and everting both feet to the utmost extent, attempts being made to as nearly as possible touch the floor with the outer side of each foot. The object was in all these movements to exercise and develop the out-rotators of the lower extremity, *i.e.*, pyriformis, gemelli, obturators, and quadratus femoris. The result was excellent, for at

this time his feet diverge in walking and standing at about a right angle from each other, or as near that as is normal. This he was able to do perfectly within less than ten weeks after commencing the exercises.

Club-foot is often due to muscular weakness, and is generally treated with appliances, which instead of over-coming this defect too often increase it, either by doing the work of the muscles (as in the case of elastic bands), or by restraining them from action. I do not wish to be understood as saying that braces should be discarded, nor do I at all expect to see exercise altogether replace the brace, but I do hold that many cases now treated with mechanical appliances would be sooner and more permanently cured by means of proper exercise, and that those which require mechanical support would be discharged sooner from the surgeon's care if with the orthopædic apparatus there were prescribed strengthening exercises. This would vary with the kind of club-foot, and the condition of the muscles involved.

Knock-knee and bow-legs, due to feeble muscles, could also be most effectively overcome with judicious exercise. A good exercise for the treatment of knock-knee, due wholly or in part to weak muscles, would strengthen the adductors and the sartorius, gracilis, semitendinosus and semimembranosus, or inner hamstring muscles, which latter tend to adduct the leg at the knee. Besides this, there would be added growth and consequent strengthening of the internal lateral ligament of the knee from repeated tension. A good motion without the use of the pulley-weight is to stand with the knees together, and then abduct the thighs as far as possible, while the knees are flexed just enough to permit the exercise. The movement is facilitated by placing the hands on the inner side of the thighs and pressing outwards.

For bow-legs the proper motion is the opposite of that just described and brings into play the three glutei, vastus externus, rectus femoris, and tensor vaginæ femoris. Another good exercise is the reverse of that for knock-knee, and consists in standing with the feet apart and the hands upon the outer side of the thighs; the thighs are then approximated, while the knee is bent just enough to admit of the movement, and pressure is made upon the outer side of the thigh with the hands. This calls into action the adductors and in-rotators of the thigh.

Round-shoulder may be real or apparent. When apparent, it is due to a forward inclination of the head and neck; and this is best remedied by several daily exercises at retrac-

tion of the head. Better still is a head-band connected with a pulley-weight. The band is fastened to the head while facing the machine, and the weight is raised by a backward movement of the head. This is repeated with a light weight until it becomes a little difficult, at which period all further efforts must cease.

The genuine round-shoulder is treated by repeated retraction of the shoulders while the hands are clasped behind the back. Strong efforts should be made to touch the scapulæ.

The literature upon this subject is meagre or plentiful as one happens to be choice or not in the selection of what possesses real merit. As a rule, however, this work has been left to the non-medical, and hence their writings are full of errors and absurdities. All works, however, contain much information that is of value. It will be my aim in further notes to call attention in detail to the treatment of special deformities. At present it is hoped that these general indications will be of use to the general practitioner and interest the specialist.

ANTISEPTIC MIDWIFERY, AS PRACTICED IN THE PHILADELPHIA LYING-IN CHARITY.

BY CHARLES P. NOBLE, M.D.,
SENIOR ASSISTANT PHYSICIAN.

The principle that all infection comes from without is now generally recognized, and antiseptic measures are used in practice for the purpose of preventing infectious material gaining access to the genital passages of the parturient woman. The theory that lying-in women are at times infected by way of the respiratory passages, though supported by some eminent authorities, can hardly be considered as proved. Infection from the bowel caused by abrasion with the dirty nozzle of a syringe has been reported. This method of infection must be exceedingly uncommon. Gonorrhœa existing as a vaginitis before labor, may subsequently extend through the uterus and tubes, and set up purulent peritonitis. Likewise pus from existing pyo-salpinx (or other pus sac) may gain entrance to, and infect the peritoneum during or subsequent to labor. Instances of both these events has occurred in the practice of the Charity. But here also the infection originally came from without. Hence in the healthy parturient woman the problem is to prevent the access of noxious matter to the genital passages. In carrying out the antiseptic practice here, it is especially borne in

mind that infection is usually carried by means of the fingers, instrument or other solid bodies brought in contact with the genitalia rather than through the atmosphere.

Whether we reject the respiratory passages as a route for infection, or not, it is unquestionably a fact that a prolonged residence at a hospital except under very exceptional hygienic conditions, deteriorates the health. Hence, patients are admitted only shortly before their expected confinement. While waiting they are ordered baths, not only for cleanliness sake, but to keep the skin active. A bath is given at the beginning of labor, unless there be some contra-indication. The clothing is also changed at this time. Whenever practicable the parturient is confined in a room separate from other patients. Thus her immediate environment is aseptic.

The nurse is impressed with the principles already noticed. She is directed that not only her hands but that all instruments and implements must be made aseptic before being brought in contact with the patients' genitals. The solutions used to accomplish this, after the use of soap and water, are bichloride of mercury solution 1-2000 where practicable, or carbolic acid $2\frac{1}{2}$ to 5 per cent.—this being used more especially for instruments. Where metal catheters are re-used they are to be passed through a flame, cleansed and washed in carbolic solution. Each patient has a separate syringe, the nozzles of which are to be cleansed and disinfected after use, and again disinfected before re-use. Antiseptic gauze is used for wash-rags.

The attendant is to bear in mind that in normal labor the less the genitals are disturbed the better. Hence, information gained by abdominal palpation, both as to the position of the fetus and the progress of labor, is doubly valuable, since it is gained without risk. Before making touch the hands are scrubbed with soap and water, nor is the nail brush spared. They are then rinsed in the bichloride solution. Carbolic oil is used as an unguent. (This is not beyond criticism.) Touch is made as seldom as possible. The placenta is expressed. This may be regarded an antiseptic measure, since it tends to prevent the retention of clots in the uterus—a favorable nidus for germs. Rents of the perinæum, unless slight, are sutured; an open avenue for infection is closed. Slight rents are touched with carbolic acid. Soiled clothing is then removed, the external genitals and surrounding parts washed with bichloride solution; a sublimate gauze napkin and the binder are now applied. The sublimate gauze napkin is dampened in the

solution where it covers the vulva. In instrumental labors, where the forceps have been used in the pelvic cavity or outlet, a sublimate vaginal injection, 1-2000, is given. When the uterine cavity has been invaded by the hand or instrument, it is also irrigated, and an iodoform pencil (100 grs.) is left in the cavity. This is also done after the delivery of a macerated fetus. Care is taken that sublimate solution is not retained either within the uterus or vagina. The amount of iodoform seems large, but poisoning has not been observed. The formula for the pencil is:

R	Iodiformi,	3 v
	Acacie,	
	Amyli,	
	Glycerini,	aa 3 ss
	M. ft. bacilli, No.,	ijj

The pencil dissolves slowly, and thus the genital passage is bathed in iodoform for about three days.

The after-treatment is based upon the principle that the puerperal state and puerperal processes are physiological. The vagina and uterine cavity are let rigidly alone, unless special indications arise. Sutures are usually removed on the eighth day. The patient's genitalia are bathed four times daily with the sublimate solution, and the gauze napkin changed when soiled.

The gauze is made in the institution by boiling cheese cloth in a carbonate of sodium solution to remove the oil, and, after drying, soaking it in the sublimate solution, and again drying.

This method of antiseptics has the double advantage of securing for the puerpera that repose which is so necessary for her well-being, and of protecting her against the risks of sepsis. At the same time, she is not subjected to the danger of sublimate and carbolic poisoning, from which she can never be entirely free when these agents are frequently used within the genital passages.

—The *Lancet*, Feb. 25, 1888, states that a medical missionary nearly lost his life through an outburst of fanaticism at Foo-chow, China. It seems that the doctor, who was attending a patient with hemorrhage, immediately proceeded to check the latter in disregard of a native superstition according to which delay should have been made until the patient's friends had finished consulting the gods in the joss-house. The patient died, and the Chinese would have boiled the doctor in oil but for the courage of some of the converts.

ASCLEPIAS SYRIACA (MILKWEED) FOR LUMBAGO.

BY B. F. RECORDS, M.D.,
SMITHVILLE, MISSOURI.

Dr. Clarence G. Hollister, in the REPORTER Feb. 18, 1888, gives an excellent article on this common and inconvenient affection. As to its pathology I have no comments to make. I have observed that it is more frequent in winter and spring than at other seasons, and in wet, damp cloudy weather than during dry, cold or bracing weather. It seems to be a result frequently of "catching cold." I have further noticed that there is tonic spasm of the lumbar muscles. A few years ago I was enabled to detect a malingerer who was anxious to have his trial for attempted murder postponed, claiming that he was suffering with lumbago to such an extent that he could not leave his bed. By order of the Court I examined him and found the lumbar muscles relaxed, and declared him a malingerer, and in four hours after having been carried into the court-house, he walked off as vigorously as an athlete, and succeeded in making his escape. I have never used the combination of remedies mentioned by Dr. Hollister; though I believe it to be good, perhaps specific; yet I have a remedy that never failed me since I began using it in 1873, and that is a decoction of *Asclepias syriaca*, or "silkwweed," "milkweed," as it is called. It is indigenous in Western Missouri, and very generally, I believe, in the Middle and Western States. It grows on rich land, in fence-corners, meadows and cleared lands not used as pastures. It is perennial; grows rapidly from early spring until August, when it is from three to six feet high. It has a purple stock as thick as a leadpencil or even the size of an index finger. It has thick fleshy leaves, very brittle, and exuding a thick, gummy, milky juice; it generally has many branches at top; blooms in August; flowers in bunches, and is purple in color; bears a rough pod as long as a finger, and from half an inch to an inch in diameter at base, tapering to a point thorn-shaped, filled with a white, fibrous, silky furze, in which are the seeds. The root grows perpendicularly, a foot to eighteen inches in length, almost without rootlets, is white and tough; the root is the part used, and may be dug any time from August until April. Its physiological action seems to be diuretic, and mildly laxative. It increases digestion, and stimulates the appetite. That is as far as I have observed its action. I believe it is to some

extent a heart tonic, though of that I am not positive as yet.

In 1873, I had a severe lumbago, for which I had tried various remedies, both internal and local, including electricity; but without relief. An old farmer said he could cure me, and related his own experience, and furnished the roots. I began using a decoction, drinking a half teacupful four or five times daily, and in a few days was completely relieved. Then I recommended it to all my patrons who called for treatment, and heard from them the most extravagant praises of its virtues, in return for my suggestions. Amongst my first cases was a man about fifty-eight years old, a painter, who had been disabled from work for nearly a month. He said that when he attempted to arise of mornings that he had to roll out of bed on to the floor, and hold to the bed-post with one hand, while attempting to pull on his pantaloons with the other. He could not stand still, but had to keep moving constantly until he could get to a seat. I gave him some of the roots, and he used the tea through the day and next morning, got out of bed and dressed with but little pain, and in a week was able to resume his trade. Since then I have met and treated perhaps a hundred cases with like results.

In 1875 or 1876, I saw an article in the MEDICAL AND SURGICAL REPORTER, from some physician in New York (his name and location I have forgotten), stating the action of *asclepias syriaca* in dropsy. At that time I had a typical case of general anasarca, in a man sixty-five years old. He had heart disease badly. His case grew from bad to worse, baffling me with the best remedies I could find. The anasarca had extended up to the thorax. He could not lie down. His body and limbs were distended until the skin seemed ready to burst. I regarded his case hopeless; but concluded to give the silkwweed a trial. I punctured his limbs in numerous places and wrapped them in cloths, and thus started a flow of the water. I put him on a free use of the tea, and in ten days he was reduced to a mere skeleton; but could lie down and sleep comfortably. His appetite returned; his bowels from being torpid, acted normally, and there was a constant healthy action of the kidneys. His heart's action became more regular and its impulse strong. He lived a year and a half happy and content, when his heart suddenly failed, and he died in a few hours. I have used the same remedy in a few similar cases since and it has proved the best of all remedies so far.

REPORTS OF CLINICS.

CHARCOT ON APHASIA AND AGRAPHIA.¹

REPORTED BY PIERRE MARIE.

In a lecture delivered at the Salpêtrière, in December, 1887, Professor Charcot showed a new case of agraphia and entered into some details of the history of this special mode of aphasia, to the study of which he has so largely contributed. I have thought it would be interesting to reproduce the principal points of the teaching of our master upon this subject. The patient was a woman, 64 years of age, presenting certain hereditary antecedents, who, in 1868, at the age of 44, had her first attack of hemiplegia. It was a right-sided hemiplegia and was accompanied by paralysis of the tongue. Normal speech, as well as movement, returned after the lapse of a certain time. But since this time there has existed a genuine impossibility to write, although the patient was perfectly able to hold the pen, knew what she wished to write, and had even preserved the accurate visual conception of the orthography of the words; but the idea of the letters was not present, she could no longer remember what form to give the letters. It was, moreover, certain that, prior to this time, she had possessed a considerable degree of education, which was proved by the examination of her expense book kept up to the date of her illness. It was also shown that, since the hemiplegic attack, the patient had read the newspaper daily and spoken distinctly. In 1879 there was a second attack, the woman falling suddenly in the street, stricken with left hemiplegia and complete loss of language. Since this time there has been a paresis of the right side, but language returned at the end of two years. In 1885 there was a third attack, followed by a certain difficulty of speech, characterized as a transitory trouble of articulation. Lastly, during the same year there was a fourth attack, resulting in complete and permanent loss of speech. Since then there has been a pseudo-bulbar labio-glosso-pharyngo-laryngeal paralysis, so extreme that sometimes it has been necessary, so difficult was deglutition, to nourish the patient by means of cesophageal tube. The laryngoscope clearly shows that the cartilages of the glottis cannot be sufficiently approximated to produce sound. But this is a phenomenon added to and wholly independent of the agraphia which has ex-

isted alone since 1868. Besides this, as is easily seen, the patient is neither deaf, nor verbally blind; she sketches, without hesitation, the objects of which the names are written or spoken. The inability to write does not proceed from paresis of the hands, which is not so great as to prevent her from holding a pen and copying fairly well the characters and figures printed or written before her. But when she wishes to "compose," to write what is dictated by her own thought or what is communicated to her, that is entirely a different affair, and she is absolutely incapable of doing it. In a word, this patient has preserved the visual image, the auditory image, and perhaps also the motor image of articulation, though of this last faculty one is unable to judge, because of the laryngeal paralysis. But she has completely lost the mechanism intermediating the translation of thought into written language. It is, therefore, a case of true agraphia.

According to the definition of Professor Charcot, agraphia is the more or less complete loss of coördinate movements communicated to the hand to express thought by writing, or more simply still, it may be called aphasia of the hand. This loss of coördinate movements is, moreover, independent of any other paralysis or paresis of movements, as may be proved by giving the patients characters or figures to copy, or having them execute such delicate work as sewing, crocheting, etc.

The word agraphia was introduced into scientific vocabulary in 1867 by the physiologist Ogle. The affection itself had already been exactly described by Marcé before the Biological Society, in 1856, who described the symptom of agraphia and sought to establish its independence. But this independence was not clearly and fully demonstrated until lately, and is due to the double series of proofs furnished by Charcot in 1883 and subsequent years. He first showed a case in which agraphia existed entirely disconnected from all other forms of aphasia, and, secondly, he proved that, in certain cases, the graphic faculty persisted, while other forms of language were wanting, and that in these cases the former may to a certain degree supplement the latter. It being thus shown that the faculty of written language may separately disappear or be preserved, its independent existence can no longer be doubted.

We thus clinically arrive at the isolation of four elements of speech: The auditory image, the visual image, the motor image of articulation, and the motor image of the

¹Translated for the REPORTER, from the *Progress Medical*.

written word. In this connection M. Charcot noticed an interesting passage in the works of an English physician, Hartley (*Observations on Man, 1749*), a precursor of the great English physiological school of to-day, in which this physician by the simple methods of abstract reasoning reached the following conclusions:

"Words may be considered under four aspects: 1, as impressions made upon the ear; 2, as acts of the organ of speech; 3, as impressions made upon the eye by the written or printed character; 4, as acts of the hand in writing. Upon reflection we shall find that all the ideas excited by the word proceed from one of the four sources we have mentioned, especially from the first, or auditory element, and the third or visual element."

We thus see that in ascribing a preponderating importance to these two sources of the idea of the word, Hartley did not exclude the others. Such is the basis of the opinions of M. Charcot regarding the function of language, the multiplicity and relative independence of the sources whence we draw the elements of the word.

We thus find that the substance of the faculty of language may be resolved into four special modes of the memory of the word (or the impressions and acts by which we enter into relation with the same): suppress either of these partial memories and you produce one, and sometimes even several kinds of aphasia. According to the teaching of Professor Charcot, aphasia is only an amnesia; and, on the other hand, every verbal amnesia, however slight or limited, is an aphasia. Accordingly there will remain to be considered along with the corresponding aphasias, which represent the highest degree, also the auditory amnesias, the visual motor of articulation and the graphic motor, which represent a lower degree. Upon this point Charcot has always especially insisted, since, according to his belief, amnesia is the key of all the questions of the affections of language which we are studying.

This idea of memories and of partial amnesias having for its basis an independence of centres, is, as one may easily understand, the direct counterpart of the theory that seeks to establish an absolute supremacy of the sensory over the motor centres, and that the latter act only by a sort of reflex proceeding from the first. This theory is almost entirely rejected by Professor Charcot as being entirely too absolute. The notion of amnesia applied to each of these centres

in particular, is, in fact, the counterpart of this theory, since it is based upon the independence of these centres among each other. Clinical facts, moreover, furnish us unanswerable arguments. Cases have often been found the most pronounced where verbal blindness was unaccompanied by any degree of agraphia; to such a degree, indeed (as Charcot has shown in several patients attacked with word-blindness), that in tracing characters with the hand, they come at last to understand the meaning of what they write. Likewise as regards verbal deafness, it is not rare to find it existing alone without aphemia. Several cases of this kind have been published, that of Hitzig being a beautiful example. We have here an evident proof that the motor centre of articulation has a distinct existence, and may be called into action without any reflex act from the auditory verbal centre.

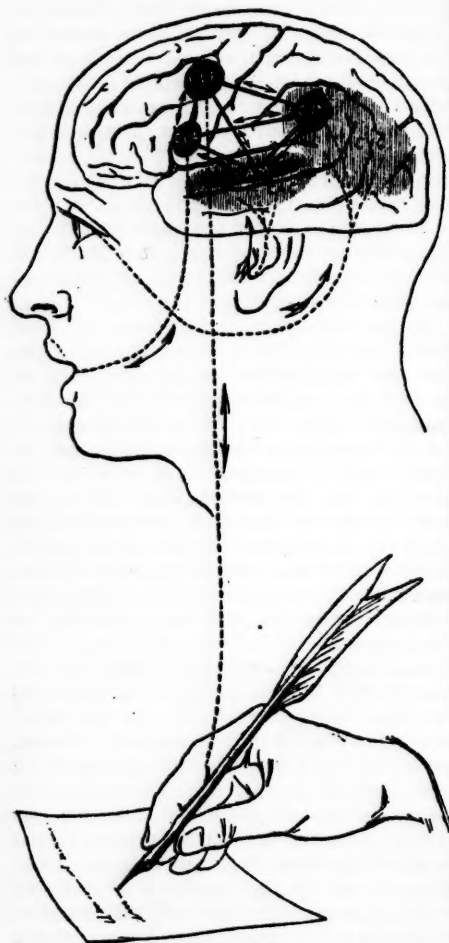
By the accompanying figure we may easily gain a notion of the centres of partial memory, the connections uniting them one to another, and of their relations with the external world. Let us take, for example, the centre for the memory of written language, or the visual centre of words, C V M; it is through the eye that the special ideas having the characteristics of the written word come to it, at the same time that the more general notions which concern, not the signification of the characters but simply their form, their external appearance, are being gathered in the common visual centre, C V C. If the visual centre for words be injured, the patient is still able to see the written words but does not comprehend them, he has verbal blindness. But if the lesion is not localized exactly at this point, which is generally the case, there is another phenomenon added: the patient will no longer perceive with this part of the brain, by the common visual centre for general visual impressions of objects—he will at the same time be attacked with both verbal blindness and with pschical blindness, the last appearing clinically under the form of hemianopsia.

The same may be said of the auditory centres, C A C, C A M.

As to the motor centres, whether of articulation or of writing, similar observations may be made, but with noteworthy differences. Just as we have seen the visual centre of words to be in intimate relation with the common visual centre, so the motor centre of written language, C L E, is in relation with the common motor centre of the superior member, and the motor centre of articulation, C L A, is in close connection

with the common motor centre of the tongue and lips. In order not to complicate the figure these two common motor centres have not been drawn, it being only necessary to mention this analogy.

It will be noticed that in the illustration the visual and auditory centres are related to



C V C—Common visual center.—C V M Visual center of words.

C A C—Common auditory center.—C A M Auditory center of words.

C L A—Motor center of articulate language.—C L E—Motor center of written language.

(The location of the centers is simply schematic and has no pretension to topographic or anatomical accuracy.)

the external world only by a single centripetal line. They are in reality only centres of impression. The motor centres of articulation and of writing are joined to the external world by a double line (or arrow): the

one centrifugal, the other centripetal; that is to say, that while they are especially centres of expression, they are also, to a certain extent, centres of impression.

As to the lines uniting the four centres of the memory of words each to the other, they express the intimate and multiple connections existing between these different centres, and concerning the importance of which we shall speak later.

At present we wish to draw especial attention to the multiplicity and relative independence of the sources that furnish us with the elements of the word. Upon this notion, in reality, is founded the doctrine of functional supplementation put forth by M. Charcot in 1883, which is being more and more accepted. It is upon this conception that the method of re-education which has often produced such remarkable results, is based. A patient like Fraenkel's, attacked with verbal deafness, and not understanding the sense of spoken words, instinctively learns to reach their meaning by one of the following methods: he either repeats, articulates the words, and, by means of the movements, is finally able to understand them—in which case the motor centre presiding over the articulation of words comes to the aid of the auditory centre; or, again, the patient writes the words which he hears and in this way seizes their sense—in which case the motor graphic centre supplements the auditory centre. Frequently, also, as has been shown by several examples, the word-blind patient comes to understand the written words by retracing the characters either with the pen or with the finger in the air, in which case the graphic motor centre aids the visual centre. The stronger impressions furnished by the graphic motor centre are thus seen to re-inforce the weak impressions, and those of a doubtful character supplied by the visual impressions. We may thus see the visual centre supplied by the graphic centre, and the auditory centre by the motor centre of articulation; and this is because the memory of the movements of articulation, and the memory of graphic movements, in the same manner as visual and auditory images, form a part of interior language, and may either of them awaken the idea of the word.

But the law of the independence of centres is not an absolutely general law, since there are cases in which the suppression of sensory visual, and auditory centres, paralyzes the centre of articulation and produces motor aphasia or agraphia. According to M. Charcot the reason of these varieties is be-

cause the apparatus of language does not develop alike in all individuals. There exists in this respect very different aptitudes and types. These depend upon whether, in the interior language, this or that centre is predominant in the representation of the word, whether in this or that individual the formation of the idea of the word takes place preferably by one of the mechanisms set forth above; in which case we have to deal pre-eminently with a visual mechanism, an auditory, a graphic motor, a motor of articulation, or with either indifferently in the case of those who reach the representation of the word by either of the four methods in question. This idea of the different types of interior language was introduced into science by M. Charcot, and we insist upon it here because of its extreme importance. Without this it is impossible to clearly understand the faculty of language or the different varieties of aphasia. It should be clearly understood that these distinctions are not the classifications of a sterile scientific eclecticism, but are the exact expression of the living reality.

It is indeed sufficiently clear that among the physiologists and psychologists who have most carefully studied this question of the sources of interior language, and who have shown the most penetration in their investigations upon themselves, some are exceptional in auditory development, while in others the visual or the motor centres are pre-eminent. It is thus easy to understand, as M. G. Ballet has shown in his thesis, why their results differ so much, although in each particular case the author was wholly in the right.¹

This conception of individual varieties also enables us to understand that among the indifferents, as they are called by Charcot, those whose centres enjoy the greatest autonomy, in the case of the destruction of one of these centres, there follows more easily the phenomena of substitution by the other centres. On the other hand, those who have cultivated only a single order of the memory of verbal images, find themselves entirely at a loss if the centre of that memory is interfered with. In such cases, for exam-

ple, one may see a single lesion of the auditory centre lead also to a verbal deafness, or true motor aphasia, although the convolution of Broca may be the seat of no lesion whatever; or a limited lesion of the visual centre may produce agraphia without any lesion in the centre of Exner (base of the second left frontal).

We may thus see that all those cases which *a priori* might be considered as against the theory of the independence of the faculty of written language, are in reality explained in the most natural manner, and that agraphia, as M. Charcot has shown, none the less remains a form of a perfectly autonomous aphasia.

SPECIAL CORRESPONDENCE.

CINCINNATI LETTER.

A most humiliating affair, not only to one of our most prominent medical men, but also to the profession of the city at large, has occurred recently. A doctor's wife was stricken with cancer. The growth was removed, and she was free from it for a number of months. The disease returned with marvellous activity. Everything that could be done was done by the best of the profession of this city and the East, but she went steadily and rapidly to the end. Every one else had given her up. A wife of only four years and the mother of three children, life was dear to her. The Faith cure was urged upon her, but her husband, of course, refused. Her friends and relatives began to talk, and it was whispered about that because she was married to a doctor she could not avail herself of all methods of cure, and must die for want of freedom in her selection. Under this fire what was left for the husband but to give up. Under his protest she went to the Faith doctors, and every day they told her she was getting better, while she was really growing steadily worse. Their encouragement possibly did her some good, but she died all the same, and let herself as well as her husband out of misery. This has been a most unfortunate occurrence, for the simple fact of the wife of a prominent physician going to these quacks, even though unassisted, will be a very great thing for them to talk about. Probably they would have cured her had they "seen her earlier," or perhaps "she had not enough faith."

This story reminds me of another quack in our midst—an old "Dutch woman," a so-called "Wasser Doctorin," who has proba-

¹One may, for example, say that in M. Stricker the motor centres are especially developed.

It is easy to understand in view of such extensive physiological variations how difficult it becomes to trace the characters that may be clinically distinguished in cortical aphasia (lesion of the centres themselves) as distinct from aphasias of conduction or subcortical aphasias (lesion of the fibres proceeding from these centres). It does not appear that up to the present time this subject has been studied with any accurate or practical result.

bly the largest practice in the city, and who tells bold falsehoods fearlessly about the most prominent medical men in the city consulting her and offering fabulous sums for her cures.

An effort which commends itself to the very great majority of the profession of this city is being made to bring our two general medical societies together again. About fifteen years ago there was a quarrel and a split in the Cincinnati Academy of Medicine, and some of the disaffected members resigned and started what is known as the Cincinnati Medical Society. Since that time there have been two medical societies here—a very unnecessary and unfortunate condition of affairs. Though the Academy was much the larger, having three times as many members as the other, yet it was not representative of the whole medical profession of the city. In the fifteen years which have passed, some of the men who took part in the old quarrel have taken *le grand voyage*; others have found more important things to occupy their minds, and a class of younger men has grown up who know little of this old grudge and care less. These men, when the yeas and nays are called, control both societies. They are in favor of a combination, and it is to be hoped that they will succeed in effecting one. Negotiations are already in progress to this end.

The coming meeting of the American Medical Association in this city, May 8 to 11, promises to be one of much interest. Cincinnati is accessible for the East and the West, the North and the South, and a large turn-out is confidently expected. The local profession is working very harmoniously, and arrangements for the social and scientific entertainment of our visitors are progressing nicely. The Chairman of the Committee of Arrangements is Dr. W. W. Dawson, Third and Broadway.

At the recent annual election of officers for the Cincinnati Academy of Medicine, the following was the result: *President*, Dr. C. D. Palmer; *First Vice-President*, Dr. Wm. Judkins; *Second Vice-President*, Dr. J. C. Oliver; *Secretary*, Dr. G. A. Fackler; *Treasurer*, Dr. Geo. E. Jones.

The last month has been a busy one in the medical college circles of our city. Commencements, alumni meetings and banquets have engrossed the professional attention. Many hearts have been made happy by the winning of the coveted prize, and many others are equally joyful at getting the wished-for sheepskin. A few have been called to the green-room, and some, failing to pass

this second ordeal, have gone home in disgrace.

The Cincinnati College Commencement was the first, with 12 graduates and an able address delivered by Dr. L. C. Carr, Professor of Obstetrics in that institution. The exercises were held in College Hall.

The Commencement exercises of the Ohio College of Dental Surgery were held at College Hall on the evening of March 7. Prof. H. A. Smith, Dean of the Faculty, presided; the diplomas were conferred and an address made by Geo. W. Keely, D.D.S., of Oxford, Ohio, President of the Board of Trustees. Prizes were awarded by Prof. Smith, an address made by Rev. Dudley Rhodes, and the class oration by A. B. Fletcher. The prizes were distributed as follows: Gold medal for best general examination, to H. T. Smith, of Cincinnati; second prize for best operative work, a gold medal, to J. F. Hussey, Ohio; third prize, a gold medal, for best mechanical dentistry, to W. W. Wallace, Ohio; fourth prize, a free ticket to session, for best examination in the junior department, to R. R. Bronston, of Indiana. The graduates of the Dental College were 46 in number. After the exercises a banquet was enjoyed at the Burnet House.

The exercises of the Miami College Commencement took place at the Odeon the evening of March 10. Rev. Dr. E. D. Morris, of Lane Seminary, made the opening prayer, and Prof. W. H. Taylor, Dean of the Faculty, followed with an address, reviewing the work of the college for the past year.

Mr. A. H. McGuffey addressed the graduates and delivered the diplomas. He advised the class to hold fast to the dignity of the profession of which they were this night made members; to ever hold in reverence their *alma mater* and the gentlemen who had taught them there with such patience and thoroughness. The prize of Prof. Daniel Millikin, a handsome microscope for the best examination in chemistry, was awarded Mr. H. S. McVey, a junior; Prof. Langdon's prize, a case of surgical instruments, was given to Benjamin Neal for the best anatomical examination. The William's prize, for the best examination in ophthalmology, to E. R. Axtel. The faculty prize, one hundred dollars, was awarded L. S. Elrod. The valedictory address, on the part of the faculty, was delivered by Dr. E. S. Walker, Professor of Surgery, who took as his subject, "The Malingerer." He startled his audience in the beginning by telling them that there was probably not one among them who had not at some time or other been a malingerer, to

avoid the performance of some undesired task. He then went on to state the people who were most likely to be malingerers, the diseases most likely to be simulated, and those who made up the class of malingerers. The greatest number were soldiers or sailors, who wished to escape duty or danger; yet it was found among all classes and conditions, even among children. It called for the most careful judgment on the part of the physician or surgeon; for it was certainly better that twenty guilty men should escape than that one man who was really ill should be condemned as a malingerer. The speaker reported a number of cases, and gave some unique ways in which disease and injury had been feigned. He said it was often the case in hospitals that patients would wish to remain after they were entirely recovered, and would feign all sorts of imaginary ailments to attain this end. A mixture which usually fixed them up in a hurry was the "mistura diabolica." It is composed of asafetida, aloes, and valerian, and is a terrible compound.

Closing his remarks on malingering, the speaker then turned to the graduating class and gave them some good advice. As a good code of ethics, he recommended the golden rule, and he told his hearers not to be jealous overmuch of their neighbor's success and to mind their own affairs, with much other good counsel. After the commencement exercises the faculty entertained the graduating class, the alumni and the staff of the Cincinnati Hospital, at a sumptuous banquet at the Burnett House.

The following officers were chosen at the alumni meeting: *President*, Dr. Chapman; *First Vice-President*, Dr. F. W. Langdon; *Second Vice-President*, Dr. Collins; *Secretary*, Dr. J. C. Oliver; *Treasurer*, Dr. B. Merrill Ricketts; *Executive Committee*, Drs. Stanton, J. A. Thompson and G. R. Holmes.

The commencement of the Medical College of Ohio occurred at the Odeon, on the evening of March 8, 1888. It was the 69th annual commencement of this well-known college, and the spacious hall was crowded to its utmost capacity with the friends of the institution. The trustees of the college, the faculty and alumni occupied seats on the stage and formed a brilliant assemblage. Rev. W. H. Warren, pastor of the Vine St. Congregational church, opened the exercises of the evening with prayer. Prof. W. W. Seeley, Dean of the College then made a few remarks stating the work of the year, and referred to the loss of three of the candidates by death from typhoid fever. Several others were sick so long a time from

this disease that they were deterred from coming up for examination. One of those who died was Dr. Anderson Rawlston, who would have graduated last year but remained over a year as interne in the Cincinnati Hospital. Here in the faithful discharge of duty he contracted typhoid fever, and after a long and terrible struggle gave up his life. By his geniality he had made for himself a host of friends while studying here.

Hon. W. W. Dickson, president of the Board of Trustees, with the usual assistance from Dr. Conner, delivered the diplomas to the happy graduates who numbered seventy in all. Mr. Dickson then made an address to the class of which the following is an abstract:

That you have chosen medicine for your profession, indicates that your aim is not simple money-getting. No doubt if you are reasonably successful you will make a living by your chosen life work, but were it your ambition to become a plutocrat you would scarcely have selected medicine as your route to riches. Yet money has its uses. A reasonable amount of it means good food, good clothing and shelter. More of it and we have the luxuries, a fine house, rich raiment and dainty food. And then with plutocratic wealth you may play polo, ride behind a \$50,000 horse, sail the seas in costly yachts, cover your wife with resplendent clothing and diamonds, or she may follow a pug dog costing thousands. Money is an excellent servant but an ignoble and remorseless master. Young gentlemen, if you go from this hall determined to keep the better sentiments uppermost, if you reserve your homage for moral and mental worth, you may accomplish much. But we speak louder by deeds than words. So bear yourself in your profession that it will command respect.

The following prizes were then distributed: Prof. Whittaker's prize, a case of instruments of precision, for the best examination in theory and practice, given to Dr. Theodore Mumaugh, Lima, O.; Prof. C. D. Palmer's prize in obstetrics and gynecology, case of instruments, for the best examination in this department, to Dr. John Edwin Wilson, Falmouth, Ky.; Prof. P. S. Conner's prize in surgery, a case of surgical instruments, to Dr. W. Edgar Hover, Lima, Ohio; Prof. W. W. Dawson's prize for best bandaging, to Dr. George A. Welch, Athens, Ohio; Prof. Dawson's prize, for best dissection, a gold medal, to Dr. Homer C. Bennett, of Bellefontaine, Ohio; Prof. Thad. A. Reamy's prize in clinical gynecology, a gold medal, to Dr. Ed. W. Johnston, Union City, Ind.;

Drs. DeBeck and A. V. Phelps of the histological laboratory gave a prize, a cabinet of specimens, to Dr. Albert H. Freyberg, of Cincinnati, for the best examination in this branch; the Faculty prize, for the best examination in all branches, was given Dr. John B. Murphy, of Cincinnati; appointment as Resident Physicians to the Cincinnati Hospital, Drs. Thos. Hayes, S. F. Kramer and David Wolfstein, of Cincinnati; as Resident Physicians to the Good Samaritan Hospital, Drs. Otto Juettner, Cincinnati, and U. D. McDowell, Millersburg, Ohio; as Resident Physician to the Children's Hospital, Dr. George W. Davis, Batavia, Ohio; as Acting Assistant Surgeons to the National Military Home at Dayton, Ohio, Drs. Geo. H. Welch, Athens, Ohio, and Clarence M. Parkes, Sullivan, Ind.

Surgeon-General John A. Billings of the United States Army stationed at Washington, and a graduate of 1860, was then introduced, and delivered an address. He took for his subject the Medical College of Ohio before the war, and remarked that before he was through his paper he was not sure that he should not have called it The Medical College of Ohio during the war, for those days of early growth and progress were so replete with strife. He gave a most graphic description of the early days of the old College, and perfect pen pictures of some of the older members of the faculty about whom we now read. He related how it was the custom then to require of the candidate for graduation the writing of an inaugural thesis. It was the performance of this melancholy duty which led him into the line of work which has occupied the greater part of his time for the past twenty years. In the search through the public and private libraries of Cincinnati, Philadelphia, New York and elsewhere, which lasted over a period of six months, he became convinced of three things: The first was, that it requires a vast amount of time and labor to search through a thousand volumes of medical books and journals for items on a particular subject, and that the indices of such books and journals can not always be relied on for their contents. The second was, that there are in existence somewhere over 100,000 volumes of such medical books and journals, not counting re-prints. The third was, that while there was nowhere in the world a library that contained all these books there was not in the United States even a fairly good one. This it was that led him at the close of the war to try to establish for the use of physicians a fairly complete medical

library at Washington, and in connection with this to prepare a comprehensive catalogue and index which would spare medical writers and teachers much drudgery. The paper was quite long, and full of interest.

The valedictory address, on the part of the Faculty, was made by Prof. C. D. Palmer. An elegant collation was served after the close of these exercises.

PERISCOPE.

Allochiria.

At the meeting of the Biological Society of Paris, January 14, 1888, M. Gellé reported a case of auditory allochiria, and remarked that allochiria is the perception of sensation on the side of the body opposite to that which is irritated. This phenomenon has been especially observed since Obermeister's description, in patients suffering with locomotor ataxia and in affections of the cord, either traumatic or otherwise, and up to the present time, the observations have been with cutaneous sensations. The patient, feels, for example, in the right leg a blow struck upon the left leg. In Gellé's case, a noise produced at the right ear is heard only at the left. The patient is affected with Menière's vertigo, with manifest lesions of the middle ear, especially the left. Pressure upon the left ear provokes vertigo after a time, and causes pain; hearing is also painful on this side. The right ear is relatively good. The patient is not tabetic, nor paralytic, nor hysterical, and she has since recovered. The patient heard on the left side a piping sound produced in the right carotid. M. Féré stated that he had observed the same kind of phenomena in hysterical patients. Brown-Séquard thought that M. Gellé's observations tended to confirm the theory which he had maintained for a long time, that there do not exist double centres, but simple centres for the two halves of the body.—*Progrès Médical*, January 21, 1888.

Interstitial Salpingitis.

Dr. H. J. Boldt, in a paper on interstitial salpingitis in the *American Journal of Obstetrics*, February, 1888, says that the inflammatory processes occurring in the Fallopian tubes have usually been divided into catarrhal salpingitis and salpingitis. He adopts the term interstitial salpingitis from A. Martin's book, "Pathologie und Therapie der Frauenkrankheiten," because it expresses the pathological conditions present. He has not found primary tubal inflammation; for usually

the inflammation is transmitted from the uterus. Inflammation of the mucosa may be catarrhal or purulent, and varies greatly in degree. In interstitial inflammation the connective tissue between the muscle-bundles is first invaded, and the process varies from slight inflammation to partial destruction of the walls by suppuration. Boldt considers interstitial inflammation to be secondary to that of the mucosa, though in gonorrhœic and septic infection in the puerperal state the disease may run such a rapid course that both appear almost simultaneously. He considers that suppurative salpingitis is always caused by septic or gonorrhœal infection; also that it is possible for catarrhal salpingitis to be converted into the purulent form by intense irritation, as by intra-uterine injections, or incautious manual examinations.

Before subjecting patients with disease of the Fallopian tubes to operation, Boldt always treats them for a period varying from four months to one year, in order to satisfy himself that they cannot recover without operation. But for pyo-salpinx, following or accompanying the puerperal state, he advises immediate operation.

Four illustrative cases are reported in the paper referred to, and the conditions found under the microscope are described and figured. The first stage of the process is given as an œdema of the interstitial tissue; the next is marked by an infiltration with inflammatory corpuscles, with a simultaneous breaking up of the smooth muscle-fibre into such corpuscles, which are also derived in part from the connective tissue. The inflammation varies much in intensity, and may result in more or less breaking down of the tissue in the formation of miliary abscesses, or in diffuse purulent infiltration. Interstitial salpingitis is considered the initial form of both miliary and diffuse tuberculosis. Besides abscess and purulent infiltration, hyperplasia and atrophy are described as terminations of the process. Boldt thinks that in atrophy of the Fallopian tube a number of the epithelia and muscle-fibres perish by being converted into medullary or inflammatory corpuscles. Atresia of the tube is explained upon this hypothesis, or else that the epithelia have been destroyed by ulceration. In all cases of interstitial salpingitis described by Boldt, more or less marked peritonitis could be seen, either in the form of acute swelling or as pseudomembranes, caused by the transportations of infectious material—micro-organism or ptomaines—to the peritoneum, by way of the connective tissue.

Treatment of Migraine with Antipyrin.

T. J. Bokenham, of St. Bartholomew's Hospital, in a communication to the *Practitioner*, February, 1888, says that during the last two months he has had an opportunity of treating as many as twenty-six cases of migraine with antipyrin. The results have been in every case perfectly satisfactory, although the dose given has been quite small, in no case exceeding four grains. He describes three typical cases: namely that of a near relative; that of a girl, the members of whose family exhibited epileptic tendencies; and an attack as occurring in himself.

His own migraine is usually brought on by over-use of the eyes, and is almost invariably preceded by well-marked teichopsia, which lasts for from half an hour to several hours. As the attack proceeds, he gets a tender spot on some part of the scalp, generally in the right parietal region, a vascular disturbance, with throbbing behind the right eye. The first time he took antipyrin it was in a dose of three grains, and after the pain was well developed. In a very short time the throbbing entirely ceased, leaving only a dull aching pain behind the eye; the flushing of the face also diminished. After half an hour he took a second dose of three grains, and by the end of an hour from the time of taking the first dose he was quite well, with the exception of a slight tenderness of the scalp. Since then he has tried the drug, in the same dose, taking it as soon as the teichopsia comes on, with complete success in altogether preventing the attack.

The second case is that of a woman who had been subject to attacks of migraine for many years. The starting point of her attacks is also in the eyes. For a long time large doses of ammonium bromide were successful in cutting short the attacks, but recently this drug seems to have lost most of its power. Antipyrin entirely relieved the prostration and pain after the second dose of three grains.

The third case is interesting in that it points to another class of cases in which antipyrin may be of use, namely epilepsy. Here the mother is epileptic, the father is of a very excitable temperament, and another member of the family showed signs of weak intellect. In this case migraine usually followed any undue fatigue, and was attended with a good deal of prostration. The author says he happened to be with her during one attack and promptly administered antipyrin. The headache yielded entirely after the second dose of four grains. He has also under observation two epileptics, in whom the fits are

preceded by a well-marked aura in the shape of tingling of the extremities of the fingers. They are directed to take, as soon as they feel this sensation, ten grains of antipyrin in a little water. If the theory of Dr. Liveing concerning the close pathological relation between migraine and the other so-called paroxysmal neuroses be true, there is some hope that in both these diseases we may be able to check or to cut short the attack by the timely use of antipyrin. He has not yet had the opportunity of observing the effect on these two epileptics, but it would certainly seem to be worth a trial.

He feels sure that antipyrin requires only to be known to become a regular remedy in the treatment of migraine, and that practitioners will use the small dose with less hesitation than they would the large ones previously given.

Treatment of Inflammations in the Region of the Ileo-Cæcal Valve.

Dr. M. H. Richardson, surgeon to the Massachusetts General Hospital, in a paper read before the Suffolk District Medical Society (*Boston Med. and Surg. Journal*, January 26, 1888), sums up his conclusions as to the proper treatment for these cases in the following propositions:

1. In mild cases of inflammation in the region of the appendix there should be no surgical interference till physical examination reveals the presence of an abscess, which should be incised by the post-peritoneal method.

2. In violent cases, where it is evident that there is a general peritonitis, laparotomy should be done immediately, just as soon as a diagnosis of general peritonitis has been made.

3. In violent cases where it is doubtful whether the general peritoneal cavity has yet been invaded, and where the history and the physical examination favor the presence of an abscess in the ileo-cæcal region, though it is impossible to locate the exact seat of the inflammatory process, an exploratory incision should first be made in the right iliac fossa, and the ileo-cæcal region explored post-peritoneally.

4. The best incision to reach the appendix in the average case, is along the outer border of the rectus, about four and a half inches from the spine of the pubes.

5. The best incision for extra-peritoneal exploration is parallel and close to Poupart's ligament, beginning in about the centre, and extending outwards and backwards a sufficient distance.

At the same meeting Dr. J. W. Elliot reported a case of perforation of the vermiform appendix, causing an intra-peritoneal abscess and general adhesive peritonitis, and the following propositions were formulated for discussion:

1. For cases of chronic or subacute perityphlitis with a small tumor, or without tumor, expectant treatment.

2. For cases of chronic or subacute perityphlitis with a large and increasing tumor, extra-peritoneal incision.

3. For cases of acute perityphlitis with threatening symptoms and with tumor, extra-peritoneal incision.

4. For cases of rapidly acute perityphlitis with alarming symptoms, and without appreciable tumor, exploratory incision (extra or intra-peritoneal).

Dysentery in Ireland.

At a meeting of the Royal Academy of Medicine in Ireland, on January 13, 1888, Mr. Conolly Norman made a communication as to the cause of the outbreak of dysentery with which he had to deal in the Richmond Lunatic Asylum, in Dublin. Mr. Norman stated his belief that the outbreak was due to defective drainage, and laid down the following as probable general laws that regulate the appearance of dysentery: 1. Dysentery is communicated through exhalations from a soil saturated with the products of organic decomposition. 2. The incidence of dysentery at particular times and seasons is due to the increased moisture of the soil at such times. 3. When dysentery breaks out there is commonly a concurrent outbreak of severe diarrhoea. 4. Dysentery appears where dysentery has been before. 5. When dysentery appears over a large area, including its own haunt, it appears in the latter situation in its worst form and to the greatest extent. 6. Like other malarial affections, dysentery attacks by preference those who are not acclimatized to the conditions that have produced it.

Mr. Frazer believed that dysentery was and could be contagious, for he remembered making a *post-mortem* examination in the Richmond Hospital from which he got a most severe attack of dysentery, and which he believed to have been produced by contagion. He was not satisfied with Mr. Conolly Norman's observations upon malaria. From the most remote times dysentery had been epidemic in Ireland. In the battles during the reign of Elizabeth the soldiers were decimated by it; the same thing occurred during the wars of Cromwell and William III; and yet Ireland had always been remarkably free from

malaria. But that dysentery might be associated with malaria, on the other hand, was possible. Malaria, as such, was confined to very limited districts in Ireland. He knew that it existed along the Dublin river; but there had been no co-existence of dysentery in those spots. Another remarkable fact was that it occurred in certain seasons of the year. It was well-known to break out in the autumn, especially after the first frosts, which was accounted for in former times by persons drinking water containing animal and vegetable material in a state of decay. As for its mortality, he was resident in the hospital during the years of 1847, 1848, and 1849, and had to attend specially upon fever and dysentery; and the mortality in cases of dysentery—of which only the very bad were admitted—was three times as great as in the worst fever cases; it amounted at one period to one out of every four cases. Dr. Cheyne used the remarkable expression that dysentery was "fever turned in on the bowels." His preparations illustrative of the disease were in the Richmond Hospital, and were described in the series of the Dublin hospital reports. —*British Med. Journal*, February 4, 1888.

Case of Chronic Mercurialism.

At the meeting of the Society of Internal Medicine, February 6, 1888, Dr. Landgraf reported the case of a mechanic, twenty-five years old, who had previously enjoyed good health. Since May, 1887, he had been engaged in carbonizing in a factory which made the loops for Edison's incandescent lamps. The table at which he was at work stood immediately under a large tube which is filled with mercury, and has a small opening from which the mercury flows upon the table. He has often found mercury in his pockets. He admits also that in course of time his dinner kettle has become completely silvered. Notwithstanding all this, the patient was in perfectly good health, until six weeks before Christmas; in other words, after being engaged in this work for six months.

The first symptoms of intoxication were mercurial stomatitis, slight bleeding from the gums, and fetor from the mouth. These symptoms subsided under the use of suitable gargles. Soon after this, uncertainty in the use of the hand appeared. The patient noticed that he became excited; he could still perform his duties, but just as soon as anyone looked at him he became restless, and was unable to work. At last, the approach of his chief would cause him to stop at once in the midst of his work. He quit work in

January, 1888, and on January 31 came in his present condition to the Charité. The patient is a strong muscular man, whose internal organs are entirely sound. The pulse is persistently slow, beating 50 or 60 times to the minute, and there is a double sound in the crural arteries. He complains now of stomatitis, slight bleeding from the gums, ulcerations, oppression in the epigastrium; he has no diarrhoea, but rather a disposition toward constipation. His chief complaint is trembling of the limbs. In spite of the strong muscular development of the arms, these tremble violently as soon as they are stretched out. This condition is more striking in the left hand than in the right, and is explained by the fact that the patient was accustomed to work with his left hand. A slight difference is also present in the lower limbs. Sensation is normal. The muscles respond more readily to the electric current than the nerves. Mercury can be detected in the urine, which is, in other respects, unaffected. The manner of the patient is most strikingly changed. In telling of his symptoms he is uncommonly talkative, but he confuses the words, putting one in place of another; this is especially true on the approach of the physician. No noteworthy change in his condition has yet occurred. — *Deutsche Medizinisch-Zeitung*, Feb. 13, 1888.

Multiple Abscesses of the Liver and Lungs.

At a meeting of the Royal Academy of Medicine in Ireland, January 13, 1888, Dr. Finny exhibited specimens illustrating pyæmic multiple abscesses of the liver and lungs, which had run a rapid course of about ten days, and in which jaundice and the expectoration of pus had occurred but five days before death. The patient, who had been admitted under Dr. Finny's care into Sir Patrick Dun's Hospital on November 16, 1887, gave a history of having been treated for pain and suffering referred to the left side of the abdomen, over four years previously, and of the question being discussed as to the existence at that time of cancer of the stomach. He died on December 21, and on *post-mortem* examination, in the situation to which pain had been referred, there was found an abscess, shut in by firm and old adhesions of the peritoneum, and limited by the left kidney, the lower third of the spleen, the tail of the pancreas, and the superior surface of the splenic flexure of the colon. The abscess contained a couple of ounces of grumous, cheesy matter. The points of interest were (1) the long

duration (over four years) which had elapsed between the primary inflammation of the peritoneum and its subsequent conversion into an abscess; and, as a corollary to this, the danger, remote as well as immediate, attendant on peritoneal inflammations; (2) the mode by which the secondary abscesses of the liver and lungs were developed, namely, by the pus directly entering the portal circulation through the communication with the spleen, and thence again by the hepatic veins it was carried into the lungs; and (3) the short time which elapsed between the direct infection of the blood and the occurrence of lung abscesses, a period which may be set down as under five days; (4) the formation of the multiple abscesses was embolic in its nature, and accounted for the number and small size of the hepatic abscesses.—*British Med. Journal*, Feb. 4, 1888.

Care of the Insane.

The *Medical Record*, February 18, 1888, contains the following report of the committee of the Medical Society of the State of New York, consisting of Drs. A. Jacobi and C. R. Agnew, to which was committed that portion of the President's opening address relating to the treatment of the insane:

"1. That until comparatively recent times the insane were considered and treated as criminals and confined in dungeons or prisons. 2. Their subsequent retention in poor-houses was but a remnant and mitigation of the old system. 3. The treatment of the insane has improved with the progress of civilization. 4. Therefore special hospitals were supplied for them, and their welfare was intrusted to scientific and humane experts. 5. To return to anything like the old system of treating the insane in poor-houses or relegating them to the custody of county officials would be a grave mistake.

"As early as 1855, at a meeting of the county superintendents of the poor, held at Utica, the following, among other resolutions, was passed:

"*Resolved*, That no insane person should be treated or in any way taken care of in any county poor or almshouse, or other receptacle provided for, and in which paupers are maintained and supported.'—Fifty-fifth Annual Report, State Asylum at Utica.

"6. For the proper classification and treatment of the insane more means are required than for the patients of general or even other special hospitals. Institutions for the insane therefore demand medical experts

as superintendents, nurses trained in the general care of the sick and then in the special care of the insane; schools for the physical and intellectual training of the insane; for the practice of out-door and indoor industries, and many other appliances. 7. The Medical Society of the State of New York expresses therefore its objections to any plan or law which in any way looks to the return of the insane to the county poor-houses as being unscientific and inhumane, and expresses its conviction that those institutions, like the State Asylum, which have boards of managers accountable to the State government and also the public, are best adapted for the care of the insane poor of the State."

The report was adopted, Feb. 9, 1888.

Action of Green Hellebore Upon the Heart and Circulation.

Christovich (*Revista de ciencias medicas de Barcelona*), after testing the action of the watery extract of green hellebore root upon dogs and frogs, gave it to eleven patients who were suffering from heart disease, with disturbed compensation. From these observations he obtained the following results: 1. The contractions of the heart were more energetic, which fact could be recognized by the increased strength of the impulse. The heart sounds were louder, and the pulse waves showed increased tension. In those cases in which a difference existed between the number of contractions of the heart and the number of pulse beats, this difference disappeared or became less. 2. The frequency of the contractions of the heart diminished in those cases in which it had been excessive. 3. Irregularity in the rhythm of the heart contractions diminished in a few cases. 4. Congestive symptoms in the lungs, liver and kidneys disappeared or grew fewer. 5. The quantity of urine was increased. 6. Where dropsies existed, these were removed, and the body weight diminished in consequence.

The author found that complication of heart disease with nephritis considerably interfered with the action of the drug. In two cases an infusion of the root (25 parts to 200) was employed in tablespoonful doses every two hours; and in the remaining cases he gave from 10 to 20 drops of a solution of the extract (one part to 100), from four to six times a day. The clinical observations were conducted under Botkin.—*Deutsche Medicinal-Zeitung*, January 30, 1888.

THE Medical and Surgical Reporter.

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A correct statement of the circulation of THE MEDICAL AND SURGICAL REPORTER is published in each number. The edition for this week is 6,500 copies.

ERYTHROPHLEINE, A NEW LOCAL ANÆSTHETIC.

In a communication read before the Berlin Medical Society, last January, DR. L. LEWIN reported the result of his examination into the physiological properties of the African Haya poison, obtained from the bark of the *erythrophlœum judiciale*. His results were incidentally referred to in our Vienna correspondence (REPORTER, March 3). He stated that a concentrated aqueous solution of the poison produced insensibility with some irritation of the cornea, which appeared later than the anæsthesia from cocaine, but lasted for eight or ten hours. It diminished the pulsation of the frog's heart from thirty to eight per minute, and induced paralysis of the extremities. Similar effects were produced in dogs, which also exhibited marked dyspnoea, and peculiar convulsions, affecting the eyelids, the muscles of the trunk and those of the intestines, but not the paralyzed limbs. Then decreasing sensitiveness was observed, and death occurred without convulsions. These effects were more marked when alcoholic extracts of the drug were used. In the pigeon, vomiting, diarrhoea, dyspnoea, convulsions and death were caused by aqueous and alcoholic

extracts, injected subcutaneously; but administered by the beak, vomiting and diarrhoea were the only effects produced. Suspecting from the effects, from his knowledge of African poisons and from microscopic inspection of the poison, that the *erythrophlœum judiciale* was the active drug, Lewin obtained erythrophlœine hydrochlorate from Merck, and found that a two per cent. concentrated solution produced, with great irritation of the conjunctiva, contraction of the pupil and insensibility of the eye. Solutions of one-quarter per cent., or even one-tenth per cent., produced after fifteen to twenty minutes anæsthesia of the cornea, without apparent irritation. After injecting the solution of Haya poison under the skin of the Guinea-pig, Lewin was able to cut down as far as the muscles without indication of causing pain. It would seem either that an irritating principle is present which has not been separated from the erythrophlœine, but which is not effective in great dilution, or that the erythrophlœine itself is irritating in all but the weakest solutions.

The anæsthetic effects asserted by Lewin to follow from the local use of erythrophlœine have been confirmed in some degree by other observers. Thus F. GOLDSCHMIDT, in a communication to the *Centralblatt für klin. Medizin*, No. 7, 1888, states that after the instillation into the eyes of rabbits of a one-tenth of one per cent. solution, anæsthesia was produced which continued three or four hours; while if a one per cent. solution was used, the anæsthesia persisted for twenty-four hours. Nevertheless, complete insensibility did not result even from the instillation of several drops of a concentrated solution. In the healthy human eye he found that the weaker solution was sufficient to produce complete anæsthesia, which appeared in about fifteen minutes and lasted three or four hours. No bad effects were noted with the exception of slight conjunctival irritation and a corresponding feeling of burning and heat in the eye; there was no change in the pupil, nor in its reaction, nor in accommodation or sharpness of vision. He successfully employed it in the extraction of some fragments

of iron from the cornea, and in slitting up the lachrymal canal. The operations were painless. Goldschmidt, however, does not think that the drug will find extensive therapeutic application because, unlike cocaine, it dilates the vessels.

; A. VON REISS, of Vienna, (*Intern. klin. Rundschau*, No. 8, 1888; *Deutsche Medizinisch-Zeitung*, March 1, 1888), substantially confirms these results. Anæsthesia, in his experiments, was not as complete as that following the use of cocaine, while one or two hours after the instillation there was always cloudiness of the epithelial layer of the cornea, lachrymation, hyperæmia of the conjunctiva, and ciliary injection. Deeper lying opacities were also noted, but in twenty-four hours the eye became normal. These results followed the use of a one-quarter per cent. solution. When the solution employed was of a strength of a little over one-tenth per cent., no bad effects were noticed, and partial anæsthesia was secured. A. KÖNIGSTEIN (*Internat. klin. Rundschau*, No. 8, 1888), also confirms in the main the result just stated, but thinks that the drug will find no employment in eye surgery.

Finally, at a meeting of the Berlin Medical Society, February 29, 1888, (*Deutsche med. Wochenschrift*, March 8, 1888), Dr. G. GUTMANN reported a case in which he had instilled into the eye two drops of a two-tenths per cent. solution, for the purpose of obtaining sufficient anæsthesia to remove a foreign body from the cornea. Anæsthesia developed in half an hour, and the foreign body was removed as successfully as though cocaine had been used. But on the following day there was a very intense grayish-white cloudiness of the whole cornea, which was also quite anæsthetic. This condition continued for four or five days, and even after eight days the cornea was still anæsthetic. From the eighth to the eleventh day the cloudiness of the cornea began to diminish at the periphery. Anæsthesia was demonstrable in the centre of the cornea as late as the fourteenth day, but the cornea had cleared up so that there was only slight haziness in the centre.

Bearing in mind the rise and fall of the

alleged local anæsthetics, "gleditschine" and "drumine," it behooves one to be cautious in expressing any opinion bearing upon the probable value of erythrophloëine. It is not at all unlikely that it possesses genuine anæsthetic powers, but the indications are also strong that it may prove too irritating for use upon the more sensitive mucous membranes.

LORETA'S OPERATION: DIGITAL DILATATION OF THE PYLORUS.

What is known by the brief and appropriate name of "Loreta's Operation," consists in making an opening through the wall of the abdomen, into the stomach, and then stretching the pyloric orifice with the fingers. It was first practiced by Loreta, of Bologna, in 1882, and has been done a few times since. The last case reported was done by Loreta, January 30, 1888. The patient was a man fifty-four years old, who had been very intemperate, and who had suffered with dyspepsia since 1872, and with symptoms of stricture of the pylorus since 1880. When examined he was thin, his stomach was dilated, and a hard, fibrous cord could be felt in the region of the pylorus.

In carrying out the operation, Professor Loreta first washed out the stomach with an alkaline solution and then made an incision along the linea alba from the lower end of the sternum to the umbilicus. This exposed the stomach, which was drawn partly out of the wound, and opened midway between the greater and lesser curvatures. The index finger was then passed into the stomach in the direction of the pylorus, through which it could not be pushed. A large urethral bougie and after an œsophageal sound were then passed through into the duodenum. By this means the stricture was so far dilated that the operator was able to get his finger through the pylorus and draw it over almost to the abdominal wound. The index of the left hand was then also passed through on the right as a guide. The pyloric orifice was then dilated by forcible divulsion with the two fingers, a proceeding which the tightness of the stricture rendered very difficult. Finally, the wound in the stomach was closed

by continuous, and that, in the abdominal wall by interrupted, sutures, and an antiseptic dressing was applied. On February 9, the wound was healed, and the patient was completely free from his troublesome symptoms. Digestion was perfect, vomiting had entirely ceased, and the man had lost the look of suffering which had been so marked before the operation. Dr. Bufalini, who reports the case, says that not a single instance of relapse after Loreta's operation has yet been heard of.

We call the attention of our readers to this operation because it is one which has many things to recommend it, and because it seems probable that a greater familiarity with what may be done for patients with obstructions in the course of the alimentary canal might lead to the prolongation of lives imperilled by obstructions. The contents of the abdominal cavity are now so frequently and so successfully operated upon, that there seems to be no good reason why persons suspected of having stenosis of either orifice of the stomach should be permitted to die without an attempt being made to prolong their lives by means of a surgical operation. Only recently a man, with stricture of the lowest part of the œsophagus, died in a city in Pennsylvania, who might have lived longer if his stomach had been opened and the stricture dilated. It is possible that there were reasons for this which have not yet appeared; but it is also possible that, if his medical attendants had been fully aware of what has been done for the relief of such patients, they would have added his case to the number of those in which abdominal surgery has achieved such happy results.

FLEXION OF THE UTERUS AND OBSTRUCTION.

In several recent publications certain writers have opposed the commonly accepted and time-honored view that flexion of the uterus tends to obliterate the lumen of the cervix uteri. Their argument is deserving of great respect, although it leaves unexplained the symptoms so often observed of periods of comparative rest and comfort followed by colicky pains and the expulsion of menstrual discharges,

which in their turn are succeeded by periods of rest and the cessation of the menstrual flow. These symptoms are so often present in cases of flexion of the lower segment of the uterus, that the old illustration of a bent elastic tube seems to be applicable to the condition existing in the flexed womb.

This way of representing the mechanical conditions is supported by the appearances found in certain specimens of the uterus which are to be found in pathological museums; and only recently (*British Medical Journal*, March 3, 1888), DR. GRAILY HEWITT, of London, has described and pictured such a specimen. This specimen is in the museum of University College, London, and shows an almost total obliteration of the lumen of the cervix in a case of rectangular ante flexion of the uterus. It may be objected to Dr. Hewitt's opinion as to the significance of this specimen, that its long stay in alcohol prevents it from being taken as an illustration of what occurs during life when the tissues of the uterus are soft and pliable. Such an objection is not without force; but within reasonable limits it would seem that the specimen does illustrate the mechanical conditions of a flexed uterus during life; and that they may still be regarded as not materially different from those of a bent elastic tube. This view may be incorrect; but it is not unreasonable, and it harmonizes—as we have said—so well with the rational signs which are features of almost every day observation, that it seems unnecessary to abandon it, until stronger arguments are adduced against it than we have yet seen.

PASTEUR AND PESTILENCE.

It is pleasant to note that the proposition of PASTEUR to exterminate the rabbits of Australia by sowing among them the seeds of fowl-cholera, to which we alluded in the *REPORTER*, March 10, 1888, is meeting with the opposition which we hoped it would meet in that country. His agents are said to be on the way to New South Wales; but news comes from that country that heavy penalties will be enforced against persons "who introduce diseased rabbits." This

may not apply exactly to those who propose to introduce disease germs among rabbits already there; but it is to be presumed that it is intended to prevent such a proceeding. We would be glad if the spirit of humanity were as strong in some scientific circles as the spirit of commercial enterprise is, and if the sufferings of the lower animals were not so wholly subordinated, as they sometimes are, to the gain, or even to the ailments, of their masters. But the rabbits of Australia may rejoice that, in this case, what threatens them is regarded as so threatening to mankind that they are likely to be spared the pestilence which Pasteur and his followers intended for them.

BOOK REVIEWS.

[Any book reviewed in these columns may be obtained, upon receipt of price, from the office of the REPORTER.]

DISEASES OF MAN: DATA OF THEIR NOMENCLATURE, CLASSIFICATION AND GENESIS. By JOHN W. S. GOULEY, M.D., Surgeon to Bellevue Hospital. New York: J. H. Vail & Co., 1888. 12 mo., pp. 408. Price, \$2.50.

It is by no means easy to review a book like this one by Dr. Gouley. One cannot fail to sympathize with its object, although one may despair of seeing this accomplished. Good work has been done of late in certain special fields of medical observation, and our English brethren have suggested a carefully prepared nomenclature covering the whole ground of medical experience, which might be better known than it is. For all this, there is still an unfortunate diversity in the terms in which medical men express themselves. It is no wonder then that one should be found so desirous of securing uniformity that he would even incur the risks of proposing a new and carefully prepared nomenclature. Such an one is Dr. Gouley. Well aware of the risks referred to, he has devoted four hundred pages to an attempt to root up the growth of centuries and to plant in its stead the production of his own verbal forcing-house. Some of the new plants have a strange look, and may not long survive their transplantation. But this, time will decide. The object of the author is commendable, and we bespeak for his work the sympathetic consideration of those who shall judge its fruits.

—A Brooklyn dentist has succeeded in placing a gold filling in one of the teeth of his five-year-old setter. The method of filling was the same that he employs in treating the teeth of his regular patients. The dog submitted to the drilling of the cavity, the plugging of the gold and the polishing, with little impatience, and did not even object to having her mouth filled with a rubber "dam." The cavity was on the outside and could be worked at easily.

CORRESPONDENCE.

Masturbation and Onanism.

EDITOR MED. AND SURG. REPORTER:

Sir:—I notice in your last number, of the 17th inst., a question asked by your Kansas correspondent, in regard to "masturbation" and "Onanism," or, "if custom had made the two words interchangeable?" I only wonder the question has not been asked long before, which would have brought out the correct answer you have given said correspondent.

But, I would ask, why the author of the leading medical dictionary of this country should have suffered the error to re-appear in his revised new edition? For it was a great mistake; notwithstanding his medical dictionary has been considered as good authority in the medical world as Webster's unabridged dictionary in the English language.

Surely, a little research and study into ancient history would have convinced the most worthy and well-read author that "Onanism" was not "masturbation," but from Onan, of yore, who married his brother's widow, and took means, by partial, or incomplete sexual congress to prevent the consequences of marriage; and sacred history tells us, Jehovah was angry with him and slew him as he had slain his brother,—Gen. xxxviii: verses 8, 9 and 10. Therefore, all believers in sacred history cannot but be convinced that Onan's trespass upon nature was not "solitary vice," or so-called "self abuse." However, in a moral and physical sense we claim it is as *first cousin* to the latter.

I am sorry to feel obliged to assert, that in this Christian age of the 19th century, Onanism is *extensively* practiced both in and out of the church, by married men, who had stipulated before, or at marriage, that they would not have more than one or two children. In every case that has come to my knowledge for the past thirty years, the arrangement has resulted in unhappiness to *both* parties, and in several instances has led to divorce.

If a man treats his wife in that unnatural manner, even at her solicitation, unfaithfulness in one or the other is almost sure to result.

The act of "withdrawing" before ejaculation of semen takes place, is also frequently the cause of *early* impotency and other physical debility on the part of the male, and in many instances causing congestion and displacement of the uterus in the female, and nervous prostration too. Also great aversion to the husband, and a desire to be in the

company of other men. In fact, I am confident that Onanism, "self abuse," and excessive sexual congress, have been the cause of as many "domestic hells," which have lead to divorce, as has strong drink.

Yours truly, ISAAC FARRAR, M.D.

Forcible Feeding of the Insane.

EDITOR MED. AND SURG. REPORTER:

Sir:—In an editorial on "Forcible Feeding of the Insane," in the REPORTER of March 10, an approval is given to Rader's opinion that this procedure is not only useless but dangerous. The expression of such views by a journal so widely circulated as the REPORTER is, I believe, to be deprecated; as I am convinced that forcible feeding of both insane and of hysterical fasters is too much neglected at present outside the doors of hospitals for the insane. If the reports of such cases in the daily press are to be relied upon, there is a singular absence of this rational treatment of the wilful fasters whose deaths are so invariably mentioned as a sequel.

For a number of years I was called upon to feed in this way from one to four patients twice daily, and in no single instance was there an untoward result. I do not remember one case that was not rapidly benefitted, both mentally and physically, by it. Of course the violent struggles of new cases (and sometimes of old ones) made it very difficult to pass the cesophageal tube at times, but an occasional slipping of the tube into the larynx was not productive of injury; for real force should never be used, and the sensation imparted by the larynx is readily detected. The use of force to keep an unwilling patient in the proper position on a mattress placed on the floor, should, however, be abundant; as the more force of this kind that is displayed, the less will be really used.

There is one point that deserves correction, and that is the use of the stomach-pump for this purpose. This instrument is too rigid to communicate intelligible sensations to the hand of the operator, and it is impossible while using it to tell whether the stomach is full or not. A rubber hand-ball arrangement is far better; and the best instrument for this purpose is one constructed after the principle of Hall's syringe, in which the motive power is compressed air, and in which there are no valves to be clogged and become septic.

There is no reason for any physician shrinking from a manifest duty to such patients under his charge, as the necessary instruments for the temporary feeding of the case are always at hand. A large flexible male cath-

ter and an ordinary rubber syringe, which may be readily connected by appropriate tubing, answer all purposes until a more suitable apparatus can be obtained. To force the jaws wide enough for a gag, a blunt wooden wedge and patience are often required.

Yours very truly,

G. BETTON MASSEY, M.D.

1706 Walnut street, Philadelphia.

March 20, 1888.

NOTES AND COMMENTS.

England and Quarantine.

The editor of the *Sanitarian*, February, 1888, brings the following severe accusation against the English in their relation to what is called quarantine. They bring, he says, cholera from India to the ports of the Red Sea under cover of a clean bill of health, and distribute it at the seaports on the route. If it be overland, they leave the sick, the dying and the dead to spread the disease round about. They convey it to China and Japan, and, pushing the freedom of commerce against all restrictions, risk its introduction at every port on the Mediterranean into which they can force an entrance. But they are careful not to land it in England.

For, most remarkable of all, while the English denounce all quarantine regulations if maintained in Italy, in France, or in Spain, they enforce the most rigid quarantines at their own ports of any people in the world, even to the extent of entire exclusion, as we have before taken occasion to point out. Yet, so accommodating is England, in this respect, that while she prohibits the entry of infected ships and cargoes at her own ports, she gives them new clearances, with clean bills of health to foreign ports! And when the filthy ships and cargoes thus forwarded by English practice arrive at, and infect the seaports of other countries, English preaching is never wanting to make it appear that all the blame rests upon the filthy localities and habits of the people to whom she has sent her infected ships and cargoes.

* * * * * Sanitarians who are alive to English practice, as against Englishmen's preaching, with regard to quarantine, will not be misled by the formulated resolutions which are the common stock-in-trade of English delegates at sanitary conferences, or the balderdash of her multitude of assayists for the promotion of commerce in disease. They will look at England's practice at home; be careful to obtain and study the reports of her port sanitary authorities, and learn with wha

care she excludes infectious ships, merchandise and diseases from her own doors; her continuous watchfulness and reports with regard to cholera, especially, at foreign ports; the names and dates of all vessels sailing from such ports, and whence; and her admirable precautions against the introduction of cholera. By thus doing they will acquire knowledge of practical sanitation to which the word "quarantine" is in no respect an index. Indeed, this word should be dropped from the vocabulary of sanitarians everywhere; it is opposed to *practical work* for the prevention of disease, and the time necessary for its exercise and to cover the incubation period of infectious diseases is all the detention that accomplished sanitarians now require anywhere.

Professional Secrets—The Michigan Law Respecting Them.

In the reports of the Michigan Supreme Court for June, 1882, we find the following in a decision written by Judge Cooley:

"A physician was called to the stand, who testified that he treated a young German lady at Benham's hotel in the city of Corunna, in December, 1879, and January, 1880," for a bad case of gonorrhœa, and that he was informed that she had been at work for Riley Storrs. This evidence ought not to be passed over for many reasons. One is that the physician had no business to give it. The statute—Comp. L. 7576—provides that 'No person duly authorized to practice physic and surgery shall be allowed to disclose any information which he may have acquired in attending any patient in his professional character, and which information was necessary to enable him to prescribe for such patient as a physician, or do any act for him as a surgeon.' Every reputable physician must know of the existence of this statute; he must know from its very terms as well as from the obvious reasons underlying it, that it is not at his option to disclose professional secrets. A rule is prescribed which he is not to be "allowed" to violate; a privilege is guarded which does not belong to him, but to his patient, and which continues indefinitely, and can be waived by no one but the patient himself." (Numerous authorities for these statements are cited and the judge goes on to say): "What was done in this case may have been thoughtlessly done; but if a physician is found disposed to violate both the law of the land and the precepts of professional ethics by making such a disclosure, and if counsel invite him to do so by their questions, the commissioner, in the case of so

plain a disregard of the law to the prejudice of a third party, may well decline to be an instrument of the wrong."

Such then is the law of Michigan respecting the secrets that come to his knowledge while rendering professional service to any person. They are his only for the benefit of the interested patient. The law specifically forbids his divulging them. This is based upon common sense and the rights of all the interested parties.

We trust that this may come to the knowledge of every physician and that each one may with greater vigilance than formerly observe the law, the morals, and the good sense. We know of instances in which through ignorance of this law, physicians have submitted to brow-beating lawyers and given evidence in opposition to this law.—*American Lancet*, March, 1888.

Formulae for Iodoform.

Dr. Howard, in *Journal de Médecine de Paris*, gives a list of useful formulæ for iodoform, from which we quote the following:

For syphilitic sores:

Iodoform	3iij ¼
Thymol	3 viiss
White sugar ..	gt. xvss

This powder should be well mixed and ground up. At first it should be dusted over the sore two or three times daily. Later (in four or five days) one application daily will be sufficient.

For herpes, a mixture of

Iodoform	3 j
Oil of eucalyptus	f 3 iv

should be applied two or three times daily.

In granular inflammation of the eyes the author has used the following formula with great success. The powder should be dusted into the eye by means of a camel's-hair brush:

Iodoformi	gr. xvss
Sacch. lact	3 iss

M. ft. pulv.

Chancres, orchitis, etc., may be dressed with the following salve:

R Iodoformi	3 j
Balsam. Peruv	3 ij
Vaselin. flav	3 iss
Ol. menth. pip	gtt. viij
M. ft. ung.	

The following salve will be found of great value in burns:

Iodoformi	3 j
Ext. conii	3 iss
Acid. carbol	gr. viij
Unguent. rosat	3 j

—*Therapeutic Gazette*, Jan. 16, 1888.

Suggestions for the Next Revision of the U. S. Pharmacopœia.

A committee appointed by the Wisconsin State Pharmaceutical Association, in a report upon the next revision of the U. S. Pharmacopœia, makes some suggestions which are of interest to physicians. From the *Phar. Era*, February, 1888, we learn that the first portion of the report refers to the nationalization of the U. S. Pharmacopœia, and to some details in the constitution of future revision committees. The specific recommendations offered with regard to the pharmacopœia itself, were as follows:

1. That in the next revision the metric system be adopted throughout, the quantities of the fluid, however, being expressed not in grains but in cubic centimeters. Should this change not be deemed advisable, rather than recede a step, it would be better to retain the present system of parts by weight, "although it is safe to say that three-fourths of the pharmacists prefer measuring liquids to weighing them."

2. That a table of maximum doses of all potent drugs and preparations to be included in the next revision.

3. That the following preparations be dropped: Elixir Aurantii, Liquor Pepsini, Acetum Sanguinariæ.

4. That the following be included in the pharmacopœia: Rhamnus Purshiana, and a fluid extract therefrom; fluid extract and syrup of Quillaia; iodol; menthol; cocaine and its salts; petrolatum carbolisatum of proper strength for the general public; oleum carbolisatum of proper strength for the same purpose; glyceritum acidi tannici, U. S. 1870; glycerites of carbolic acid, gallic acid and of borax (the latter to replace the commonly used honey of borax); tinctura iodi comp., U. S. 1870; unguentum ammonii iodidi of the same strength as the unguent. iod.; ether nitrosi pepsinum.

So Called Hendon Cow Disease and Scarlet Fever.

Professor Edgar Crookshank in his further report upon the so-called Hendon cow disease and its relation to scarlet fever (*Lancet*, January 28, 1888) gives the following summary of his opinions: 1. The nature of the contagium of scarlet fever is unknown. 2. The micro-organism regarded by Klein as the contagium is the *streptococcus pyogenes*. 3. The *streptococcus pyogenes* is found, sometimes in company with *staphylococcus pyogenes aureus* as a secondary result in scarlet fever and many other diseases. 4. A

streptococcus was first observed in scarlet fever by Crooke, later by Löffler, Heubner and Bardt; but its exact relation to scarlatina and its undoubted identity with the *streptococcus* from pus and puerperal fever were definitely established in 1885, by Fränkel and Freudenberg. 5. Both the Wiltshire and Hendon cow diseases were called cow-pox by people on the farms. 6. Both diseases correspond in their clinical history. 7. The ulcers on the teats correspond in naked eye and in microscopical appearances, and the latter "vividly recall the appearances of cow-pox." 8. Calves inoculated from the discharges of the ulcers are similarly affected. 9. Post-mortem examination of such calves, or of calves inoculated with *streptococci* isolated from scarlet fever cases, show similar appearances. 10. The post-mortem appearances in such inoculated calves are the result of septicæmia. 11. There are no specific visceral changes in cow-pox apart from complications or coincident affections.

In conclusion, Prof. Crookshank promises in a further communication to publish the history of the lad shown at the meeting of the Society, the full details of the calves inoculated from the boy, and of calves inoculated from those calves, the results of revaccination of those calves, and further details from Wiltshire and Gloucestershire.

Traumatic Aneurism of the Internal Plantar Artery.

Mr. Walsham reports in the *Lancet*, January 28, 1888, a case of traumatic aneurism of the internal plantar artery of the left foot following the division of the plantar fascia for talipes equino-varus. The patient was a boy of 7 years, who was operated on in St. Bartholomew's Hospital, on July 12, 1887, for double talipes equino-varus. A sharp hemorrhage followed the operation upon the left foot, but as no subsequent trouble ensued the boy was sent home wearing a plaster bandage. On July 26, he returned, and it was then found that an aneurism had developed. This aneurism was finally cured by pressure upon the posterior tibial artery behind the inner ankle, and by pressure upon the aneurism itself, and by securing the foot and leg to a posterior splint. The patient was discharged November 6. Mr. Walsham remarks that this is the only case in which this accident has happened to him, though injury to the artery is not so uncommon. He believes carelessness on the part of the mother in permitting the child to walk about too soon, is to blame in this case.

Operative Surgery of the Male Bladder.

At a meeting of the Edinburgh Medico-Chirurgical Society, February 1, 1888, Prof. Annandale read a paper entitled, "Clinical Remarks upon the Operative Surgery of the Male Bladder," his object being to express his opinion briefly and from experience as to recent operations on the male bladder. He had performed the supra-pubic operation recommended by Sir Henry Thompson, as well as perineal section according to Mr. Reginald Harrison's method, and had come to the conclusion that the latter was the better, because the bladder was more easily drained, and the incision through the prostate did good. He advocates the operation of perineal cystotomy in the following cases: 1. In cases of constant desire to pass water, accompanied by great pain and enlarged prostate, when the ordinary treatment of catheterization and washing out has failed. 2. In acute retention from enlarged prostate. 3. For removal of tumors from the bladder. In such cases it is better to perform both operations, as greater accuracy in removing the tumor is obtained. 4. For persistent irritability of the bladder. For a fortnight after the operation he introduced a lithotomy tube, which was then changed for a short No. 14 catheter made of soft rubber, to which a tube fitted with a tap could be applied, and this enabled patients to go about their ordinary work after a time. In answer to Dr. Hodsdon, he said the tube had to be taken out and cleaned at intervals, and that there was no leakage along the sides of the catheter. Replying to Dr. Cotterill, he said that in every case he tried to incise the prostatic urethra and then the prostate upwards. The incision into the prostate, which Mr. Harrison makes on both sides, appears to have a beneficial effect in many cases of enlarged prostate.—*Medical Press and Circular*, February 8, 1888.

Personal Nomenclature.

In a letter in the *Buffalo Medical and Surgical Journal*, February, 1888, Dr. J. F. Baldwin gives the following interesting facts: "In the article on 'Nomenclature, Personal,' in 'Wood's Reference Handbook of the Medical Sciences,' occur several definitions of these several operations. As the writer of that article, I may say that these definitions cost me more correspondence than all the other five hundred put together. The definitions of Battey's and Tait's operations are quoted verbatim from letters received from each operator. *Battey's operation*—'The complete extirpation of both ovaries, while yet in a state of functional

activity, for the effectual remedy of cases of disease otherwise incurable.' *Hegar's operation*—The same as Battey's operation. *Hegar-Tait operation*—A misnomer of Tait's operation. *Tait's operation*—'Removal of the uterine appendages for physical disease other than cystoma: As the removal of the ovaries and tubes for uterine myoma; the removal of a tube for pyosalpinx, or other disease; or the removal of both ovaries and tubes for chronic inflammatory disease and adhesions.'

The object of Battey's operation is to bring about the menopause, and thus cure diseases which would be cured by the natural arrival of that period, and, hence, it has been resorted to many times for the cure of various hysterical affections. Tait distinctly disapproves of the operation, as employed for this purpose: there must be *actual physical disease*.

Penetrating Gunshot Wounds of the Cranium.

In a paper read before the N. Y. State Medical Society, February 8, 1888, on penetrating gunshot wounds of the cranium, Dr. Joseph D. Bryant said that hemorrhage should be stopped, depressed fragments of bone and all foreign bodies removed, and the wounds thoroughly drained. Statistics show that of sixty-six cases in which the bullet was removed the mortality was forty per cent., while in one hundred and seventy cases in which it was not removed, it was fifty-seven per cent. Of the recoveries when the bullet was removed, the recovery was complete in forty-one per cent., while when the bullet was not removed it was complete in only twenty per cent.

The ball should be removed immediately, when its situation can be found, but no operation should be made to search for a bullet in an unknown situation. A large, light, rigid probe must be used, and passed without force, best in such a way that the force of gravity will make it enter the bullet-wound. The ball is to be removed by a counter-opening when it lies against the opposite side of the skull, and such an opening will admit of search for and removal of the ball if it has been deflected, and also for thorough drainage. Dr. Bryant described an original method for locating the distal end of a probe passed through a bullet-wound, and recommended the telephonic probe very highly. Horsehair drainage is excellent for wounds entirely penetrating the cranium, and sometimes irrigation.—*Medical Record*, February 11, 1888.

Incontinence of Urine in Children.

In a paper on incontinence of urine in children, read before the Obstetrical Society of Boston, December 10, 1887, Dr. C. W. Townsend stated that of 355 children, 179 boys and 176 girls, taken at random among the lower and middle classes, 77 or 21½ per cent. were found to be incontinent, the limit of normal incontinence being placed at three years. The normal infants were found to stop wetting their clothes under one and a half years of age. Among the points brought out by an analysis of the 77 incontinent cases were: that 42 were boys, 35 girls, that in 47 the incontinence was nocturnal only, in two diurnal only, and in 28 both nocturnal and diurnal. In 63 incontinence continued from infancy; in 14 it came on after the primary incontinence of infancy had ceased.

In discussing treatment, the uselessness and evil of corporal punishment in the majority cases was spoken of. In regard to the operation of circumcision and breaking up adhesions between the corona and glans, its usefulness was recognized and cases cited, but it was not regarded by any means as always curative, for other causes might be operative. The investigations of Parks, who found more or less adhesions in 80 per cent. of boys under 9 years were mentioned as showing that adhesions are far from being always a cause of the trouble. Where no other cause could be found other than an increased irritability of the bladder, the use of belladonna in full doses till physiological effects appear had generally been found to give satisfactory results.—*Boston Med. and Surg. Journal*, February 16, 1888.

Detection of Strychnine for Toxicological Purposes.

R. A. Cripps proposes the following method: He digests the solid substance in six times its weight of methylated spirit, containing a little tartaric acid. This is done for several hours at a temperature a little below the boiling-point of the spirit. The liquid is then filtered, evaporated, and the residue dissolved in 1 oz. of water, and 20 minims of spirit added. The solution, containing suspended matter, is then repeatedly shaken with a mixture of equal parts of chloroform and ether, until all coloring-matter is washed out. The chloroform washings are rejected, the aqueous fluid is rendered alkaline with ammonia, and again shaken with chloroform-ether to dissolve out the alkaloid, which again is re-extracted

with acidulated water, the solution rendered alkaline with ammonia, and the strychnine finally dissolved out with chloroform-ether. The method can also be used quantitatively with very satisfactory results, if the ethereal and other liquids be washed by a second or even a third treatment with the solvent employed. To test its accuracy 0.9 grain of strychnine was introduced into a dead cat, and the stomach, etc., treated as described; 0.85 grain of pale yellowish well-defined crystals was obtained.—*Chemist and Druggist*, Feb. 4, 1888.

To Believe Writers' Cramp.

"Canseur," in the Boston *Herald*, being asked by a correspondent for a cure for writers' cramp, replies that he is unable to name one, but offers these suggestions: Change all the conditions frequently, the height of the chair or of the table, the kind of paper, using sometimes the smoother, sometimes the rougher sort. Have every description of pen and penholder at hand, and change them frequently. Don't try to write a handsome hand, for that is something that a person who has writers' cramp in perfection cannot do. Be satisfied with legibility, and this there need be no difficulty about. The trouble seems to be a nervous one, and very little things will affect it. The change from paper that is ruled to paper that is not, and *vice versa*, will always give relief, and even a change from black ink to blue has been known to be beneficial. Of course, you must have quill pens in your assortment, but their exclusive use will not help you. A friend who does a great deal of writing has turned to the type-writer for relief, but that is all that it affords. The fingers have got into the cramp habit, and in time the use of the type-writer wearies and stiffens them. Nothing but an infinite variety of appliances, constantly changed, will afford the desired relief.—*Ledger*, Feb. 27, 1888.

Antipyrin in Nocturnal Emissions.

Dr. Thör, of Beucharest, finds antipyrin an excellent substitute for bromide of potash in nocturnal emissions, being free from the objection to which bromide is liable, viz., that of producing acne. He prescribes from seven to fifteen grains in the form of tablets just before going to bed. Again, in cases of the so-called sexual neurasthenia of Beard, the same drug has proved very useful, but larger doses are required. Dr. Thör commences with fifteen grains a day, and gradually increases this to thirty grains.—*Lancet*, February 18, 1888.

Medical Men and their Fees.

The English journals announce the decision by Mr. Justice Stephen, of the Queen's Bench, of a case which is of much interest to physicians. It seems that Mr. Coumbe, a surgeon, residing at Twyford, claimed \$1000 for professional attendance on Colonel Brodhurst. The latter had met with an accident on the road, which resulted in a comminuted fracture of the thigh, the treatment of which was carried out, at his request, at Mr. Coumbe's house, where the patient, with his wife and a nurse, remained some eight weeks. Sir R. Hanson having assumed the responsibility for any liabilities incurred in the treatment, sent a check for \$500 on receipt of the bill, and the action was for the balance. The charges included \$445 for medical attendance and \$50 a week for the board and lodging of Colonel and Mrs. Brodhurst and the nurse. There were also two visits to Brighton, charged at \$100 and \$78 respectively. A Dr. Waugh and a Dr. Roberts gave evidence on behalf of the defendants to the effect that the charges were too high, but the jury gave a verdict for the plaintiff for \$275 beyond the \$500 already paid, and the \$125 paid into court by Colonel Brodhurst. It was in evidence that Colonel Brodhurst was cured without deformity or disability.

Unsuccessful attempt to Blackmail a Druggist.

An attempt to levy blackmail on a pharmacist was recently made in Kieff by two young men, who are supposed at one time to have been chemist's assistants, or, at all events, to have known something about the business. They each procured from medical men, who of course had no idea that they were not treating genuine patients, a prescription. One of these ordered the preparation of an ordinary harmless mixture, the other was for an atropine lotion. They were taken to the chemist who was to be victimized, and after they had been made up the labels on the bottles were surreptitiously changed by the young men, and the unfortunate chemist threatened with a prosecution for gross and dangerous carelessness, with the object, of course, of obtaining blackmail from him as the price of not being denounced. Fortunately, however, the victim was not so easily caught, and the trial ended in a manner little expected by the young men. It was found out that they had previously played, or attempted to play, a similar trick on chemists in Moscow, and had been successful in

obtaining blackmail to the extent of about 250 dollars. They were ordered to be sent to Moscow.—*Lancet*, Feb. 4, 1888.

Prohibiting the Sale of Secret Medicines.

A bill which practically prohibits the sale of secret medicines has been introduced into the Assembly of the State of New York by Mr. J. W. Smith. It provides that no person or firm shall sell any medicinal preparation without filing the formula of the preparation with the State Board of Health and receiving a license or certificate from that body. It further provides that no so-called secret or proprietary medicine shall be sold, unless there is a printed formula showing the nature of the compound on the bottle, and also the words, "Sale authorized by New York State Board of Health."

It seems a very simple and manifest proposition that the public should be protected against the enormous swindling of the patent-medicine trade. And such a bill as the above would certainly promote the public good. But we fear that vested interests will prove too strong for it. The propriety of a printed indorsement by the State Board of Health might be questioned, in any event.—*Medical Record*, March 3, 1888.

Abscess in the Middle Ear mistaken for Toothache.

In the *St. Louis Med. and Surg. Journal*, March, 1888, Dr. A. D. Williams says: "Early in February a young man had what he took to be toothache on the right side of the upper jaw. He consulted a dentist, who could find nothing wrong with the teeth and referred him to me. On examination I found a well-marked abscess in the right drum. The upper back portion of the membrane was bulged outwards to the extent of a pea. When punctured, pus escaped at once, and when air was blown through the drum considerable more was forced out of it. I need hardly add that this promptly relieved the "toothache." Reflex irritation between the teeth and the ear is usually from the former to the latter. In this case the usual order was reversed."

Monobromate of Camphor in Epilepsy.

Dr. Campbell Black recommends the following formula in the *British Med. Journal*:

Monobromate of camphor..... 37½ grains
Extract of belladonna..... 6 "

Extract of gentian, q.s. to form pill mass.
Divide into 12 pills. One to be taken morning and evening, or in severe cases, three times a day.

Typhoid Mortality in France.

According to the *Lancet*, February 4, 1888, M. Chamberland, chief of M. Pasteur's laboratory, has been writing an important report demonstrating the unsatisfactory character of hygiene in France. He finds that in the French army typhoid fever kills no less than 3.78 per 1000, while the typhoid mortality in the English and German armies is 0.84 and 0.19 per 1000 respectively. Again, the deaths from this disease per 100,000 of population are 63 in Paris, 148 in Marseilles, 19 Brussels, and 17 in Berlin and London. A critique on this report, published in a Lyons medical journal, points out that, in addition to faulty hygiene, antiquated methods of treatment usual in France may have something to answer for. In Lyons, which is the only French city in which the cold-bath treatment of typhoid is much practiced, the typhoid mortality per 100,000 inhabitants is much lower than in Paris, being variously estimated by M. Chamberland and his critic at 42 and 31, per 100,000.

Charming Away Warts.

"In visiting a country asylum, some years ago," writes Dr. Luke, "my attention was directed to several of the patients and nurses who were pestered with warts, and I solemnly charmed them away within a specified period. I had quite forgotten the circumstance until, on re-visiting the institution a few months after, I found that my practice had been followed by the desired effect, and that I was regarded as a real benefactor."—*Southern California Practitioner*, February, 1888.

The Age for Revaccination.

The Local Government Board has issued an order reducing the age limit for revaccination from fifteen to twelve years, under ordinary circumstances, and to ten years in case there be any immediate danger of smallpox.—*Lancet*, February 18, 1888.

Forty Years a Physician.

On March 13, 1888, Dr. James L. Stewart, one of the best known physicians of Erie, Pa., had the pleasure of gathering round him a large number of friends to celebrate the completion of his fortieth year of work in the medical profession. The celebration took the form of a dinner, followed by speeches of praise and congratulation, and the reading of a large number of letters from admiring friends in different parts of the country.

A full account of the proceedings was published in the *Erie Weekly Dispatch* of March 14.

NEWS.

—The Long Island Medical College Hospital held its annual Commencement March 9, and graduated a class of thirty-six.

—The Bellevue Hospital Medical College held its Commencement March 12, and graduated a class of one hundred and forty-four.

—Dr. Edward P. Davis has been elected Attending Obstetrician, and Dr. Wharton Sinkler Neurologist, to the Philadelphia Hospital.

—Sir Henry Acland has been obliged to submit to an operation for hemorrhagic glaucoma of the left eye. He is reported to be doing well.

—The 36th Annual Commencement of the Woman's Medical College of Pennsylvania, was held at the Academy of Music, March 15, 1888. Dean Bodley delivered the address to the graduates.

—Dr. Bramann has had the Commander's cross of the Hohenzollern House Order bestowed upon him by the late Emperor of Germany, for his skilful performance of tracheotomy upon the Crown Prince.

—A dinner to Prof. Agnew, on the completion of the 50th year of his doctorate, will be given by his colleagues in Philadelphia, in the Foyer of the Academy of Music, April 6, 1888, at 7 P.M. It has been decided to ask Dr. Agnew to sit for his portrait.

—Professor Austin Flint will deliver the annual oration before the Alumni Association of Jefferson Medical College, in the amphitheatre of the Hospital, on the evening of April 2. After the oration he will be given a reception at the Hotel Bellevue.

—A society has been formed in Paris for the purpose of special study of diseases of the mouth. This "Stomatological Society" has given occasion to different journals to grow witty over the possibilities in nomenclature which may arise from this tendency to sub-division in titles.

—The Royal Academy of Medicine and Surgery of Barcelona, announces that the Gari prize of \$300 will be awarded this year for the best essay on the Pathogenesis of Gonorrhœa, giving clinical forms of the affection, with special reference to prolonged cases and cases of repetition; concomitant and consequent affections; prophylactic treatment. Illustrative specimens are to be sent with the thesis, which must be sent accompanied with a motto in the usual way. The essays may be written in Spanish, French, or Italian, and must be sent to the Academy before June 30, 1889.

HUMOR.

IN ORDER TO CURE WHOOPING-COUGH in Warwickshire, England, they cut a piece of hair from the nape of the child's neck, chop it very fine, and spread it on a piece of bread and give it to a dog.

BOBBY—Ma, did the doctor bring me in the daytime or nighttime? Mother—In the nighttime, Bobby. Bobby—Well, I guess that's the reason I don't remember anything about it. I must have been asleep.

SORELY AFFECTED.—Mrs. Cloony—I'ts sorry Oi am t' hear Mike do be shick, Norah. Pfwat ails th' man? Mrs. McManus—Keen fer him, Kathje, keen fer him. Th' docther's after sayin' he has a mannerism an' th' hear-rt av him.—*Tid-Bits.*

ANXIOUS ARKANSAW MOTHER.—“Tommy, is that a green persimmon you air eating?” “Yes, maw.”

“Don't you know it ain't healthy to eat green persimmons on an empty stomach?”

“I ain't eatin' this green persimmon on an empty stomach; I ate a peck of 'em before I tackled this one.”—*Texas Record of Medicine.*

TRAMP (to fussy old gentleman): “Will you please give me ten cents, sir; I'm starving?”

Fussy old gentleman (producing a bill): “Dear me, starving. Can you change a dollar?”

Tramp: “Yes, sir.”

Fussy old gentleman (pocketing the change): “Dear, dear, starving! Bless me, but this world is full of misery!”

ALMOST GIVEN AWAY.—Prospective buyer—“You're sure there's no malaria here?” Real estate agent—“Not a s-s-sign of it.” Prospective buyer—“No chills and fever?” Real estate agent—“Ain't b-b-been none in t-t-t-t (excuse me) twenty year.” Prospective buyer—“Look here, my friend, what makes you tremble so?” Real estate agent (as another wave of shakes passes over him)—“I was a-a-fraid you were g-g-goin' away without buyin', sir.”—*Puck.*

OBITUARY.

CARY R. CLEWELL, M.D.

Dr. Cary R. Clewell died at his home in Telford, Pa., March 8, 1888. He was graduated from the Medical Department of the University of Pennsylvania in 1887.

JOHN M. TIMMONS, M.D.

Dr. John M. Timmons died in Whaleyville, January 15, 1888, of phthisis. He was born September 7, 1859, and was graduated from the Jefferson Medical College in 1883. He

practiced in Philadelphia till the fall of 1886, when his health failed. He travelled through the West and South for his health, but deriving no benefit returned to his home in Whaleyville, where he died.

F. R. S. DRAKE, M.D.

Dr. F. R. S. Drake, of New York, died in New York, March 11, in the forty-third year of his age. He was graduated from the University of the City of New York in 1871, and was for a time Professor of Clinical Medicine in that College, and visiting physician to the Bellevue Hospital.

WILLIS W. FRENCH, M.D.

Dr. Willis W. French died in New York, March 11. He was graduated from Bowdoin College in 1878, and from the College of Physicians and Surgeons, New York, in 1883.

CHARLES G. STEELE, M.D.

Dr. Charles G. Steele died in Buffalo, N. Y., February 11. He was graduated from the Medical Department of the University of Buffalo in 1886. He was business manager of the *Medical Press of Western New York.*

HENRY P. AYERS, M.D.

Dr. Henry P. Ayers died in Fort Wayne, Indiana, December 28, 1887. He was graduated from the University of the City of New York in 1846.

Official list of changes in the Stations and Duties of Officers serving in the Medical Department, U. S. Army, from March 18, 1888, to March 24, 1888:

Col. J. H. Baxter, Chief Medical Purveyor, will proceed to Augusta Arsenal, Ga., on public business. S. O. 62, A. G. O., March 16, 1888.

Major Wm. C. Spencer, Surgeon, died March 22, 1888, at Fort Trumbull, Conn.

Major Chas. R. Greenleaf, Surgeon, will proceed to Cambridge, Mass., on official business. S. O. 62, A. G. O., March 16, 1888.

Major W. H. Forwood, Surgeon, granted one month's leave. S. O. 20, Dept. Dakota, March 10, 1888.

Major H. E. Brown, Surgeon, assigned to temporary duty at Fort Banancas, Fla., during the absence on leave of Assistant Surgeon M. C. Wyeth. On the return to duty of Capt. Wyeth, Major Brown will rejoin his proper station. S. O. 65, A. G. O., March 20, 1888.

Major R. M. O'Reilly, Surgeon, will proceed to York, Pa., and make an examination of Capt. Edw. B. Rhum, 21st Infantry. S. O. 62, A. G. O., March 16, 1888.

Capt. J. C. Worthington, Assistant Surgeon, granted leave of absence for four months, to take effect May 15, or as soon thereafter as his services can be spared. S. O. 65, A. G. O., March 20, 1888.

Capt. M. C. Wyeth, Assistant Surgeon, granted leave of absence for two months, to take effect about April 1. S. O. 65, A. G. O., March 20, 1888.

There have been no changes in the Medical Corps of the Navy, for the week ending March 24, 1888.